

Evaluating the mental, social, and physical benefits of recreation programming for older adults

by

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Abstract

Community centres play a vital role in promoting the health and well-being of older adults across Canada by offering programs that enhance recreational, nutritional, health, and social engagement. This study aimed to develop a comprehensive survey tool to evaluate the experiences, needs, and benefits of community centre involvement among adults aged 50 and older, with a specific focus on centres in Greater Victoria, British Columbia. A mixed-methods research design gathered responses from 336 participants across various municipalities, combining quantitative data with rich qualitative insights.

Survey findings revealed significant impacts of community centre participation on physical, mental, and social well-being. Respondents reported improved physical health, including enhanced mobility, increased strength, and fitness gains from attending community centres. Mentally, participants reported reduced stress, increased motivation, and greater resilience. Socially, they reported forming meaningful connections, reducing feelings of isolation, and fostering a sense of belonging. Additional insights highlighted barriers, such as transportation challenges, caregiving responsibilities, and areas needing accessibility improvements.

The survey was developed in collaboration with a working group and regional management, ensuring its alignment with public health priorities and practical relevance to community centre operations. This tool provides valuable data to guide and support future community programming, and the study culminates with implications for fostering healthy aging to continue to effectively support the growing older adult demographic. Ultimately, the results support the positive connection between community centre attendance and health benefits while

strongly encouraging initiatives, like this study, that promote physical health, mental well-being, and social connectedness among older adults.

Keywords: Physical activity, mental wellbeing, social wellbeing, older adults, healthy aging, survey

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Land Acknowledgement

With acknowledgement and respect to the ləkʷəŋən peoples on whose traditional territory the university stands. Research was conducted in the Districts of Oak Bay and Saanich which lies within the territories of the ləkʷəŋən peoples represented by the Songhees and Esquimalt Nations and the W̱SÁNEĆ peoples represented by the Tsartlip, Pauquachin, Tsawout, Tseycum and Malahat Nations, whose historical relationships with the land continue to this day.

Avec reconnaissance et respect pour les peuples ləkʷəŋən sur le territoire traditionnel desquels se trouve l'université. Des recherches ont été menées dans les districts d'Oak Bay et de Saanich qui se trouvent sur les territoires des peuples ləkʷəŋən représentés par les nations Songhees et Esquimalt et des peuples W̱SÁNEĆ représentés par les nations Tsartlip, Pauquachin, Tsawout, Tseycum et Malahat, dont les relations historiques avec les terres continuent à ce jour.

Dedication

My eternal thanks to Dr. Jean Buckler, Dr. John Meldrum, and Art MacDonald;
without whom, none of this would have been possible.

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Introduction

The world is witnessing an unprecedented demographic shift with the rapid growth of the older adult population. By 2050, the number of people aged 60 or older is projected to double, reaching 1.5 billion worldwide. This demographic transition is poised to profoundly affect healthcare management and social service provision, necessitating careful planning and deliberate resource allocation. In the face of this demographic shift, community centres are emerging as pivotal institutions in supporting the growing older adult population. In providing access to mental stimulation, social engagement, and physical activities, community centres promote healthier lifestyles among older adults. However, the role and impact of community centres in promoting health among older adults remains under-researched.

This thesis, titled "Evaluating the Mental, Social, and Physical Benefits of Recreation Programming for Older Adults," aims to fill this research gap. The purpose of this research is to evaluate the benefits of recreation programming offered by community centres for older adults. The hypothesis is participation in these programs leads to improvements in mental, social, and physical health among older adults, thereby contributing to healthier communities and potential healthcare savings. To test this hypothesis, a survey was developed to capture the impacts of recreation programming on the mental, social, and physical health of older adults. The findings from this research will contribute to the existing body of knowledge on the role of community centres in promoting health among older adults and ideally inform policy decisions related to resource allocation for community centres.

Background

Global projections are unanimous in their prediction of the rapid growth of the 50+ demographic (United Kingdom, 2021; Europe, 2023; Ogawa et al., 2021; Mason, 2024; Government of Canada, 2022; Bureau, n.d.; United Nations, 2019). By 2050, the World Health Organization (WHO) projects that the number of people aged 60 or older will almost double, from 12% to 22% (World Health Organization, 2021). The unparalleled rapidity of this demographic shift is expected to result in the global population of older individuals reaching 1.5 billion by 2050, twice the number recorded in 2019 (United Nations, 2019.). This global pattern is mirrored in Canada, where the population of persons aged 65 and greater is forecasted to surge by 68% over the next two decades, rising from 6.2 million in 2017 to an anticipated 10.4 million by 2037 (Canadian Institute for Health Information, [CIHI] 2017; Government of Canada, 2018, 2024). This demographic shift implies that nearly a quarter of the Canadian population (23.1%) will be senior adults by 2043, and just over a quarter (25.9%) by 2068 (Government of Canada, 2022). Locally, in the Greater Victoria area, where almost 40% of the population in the district municipality of Oak Bay and about a third of Saanich's residents are currently aged 50 and greater (Government of Canada), these demographic changes could have an even greater impact.

In 2018 the Public Health Agency of Canada (PHAC) Executive Summary: *Key Health Inequalities in Canada: A National Portrait*, advised that the increasing number of older adults is placing growing demands on healthcare systems (PHAC Executive Summary, 2018). 2023 results from the CIHI Canadian health snapshot echo this concern (CIHI, 2023), highlighting that the aging global population, particularly the increasing number of older adults, is poised to profoundly affect healthcare management and social service provision. This demographic shift necessitates careful planning and deliberate allocation of resources to ensure that healthcare

systems can adequately meet the needs of an aging population (CIHI, 2023). To meet this demographic's unique needs, service delivery and resource allocation will need to be adjusted to accommodate the growing number of older adults and their specific health requirements (WHO, 2020).

The CIHI data specifically indicate that the number of older adults is increasing at a significant rate, impacting the availability and distribution of healthcare resources. This includes the need for more healthcare professionals, specialized services for chronic conditions, and enhanced support for mental health and social well-being among older adults. To address these challenges, the WHO emphasizes the need for a comprehensive approach to service delivery and resource allocation. This includes developing age-friendly health systems, promoting healthy aging, and ensuring that older adults have access to the necessary healthcare services and social support (WHO, 2020). Accommodating this demographic shift will require changes at all government and administration levels, from provincial policy amendments to local service delivery adaptations (Canadian Medical Association [CMA], 2019).

One key local adaptation involves the role of community centres, which are becoming increasingly crucial in supporting the growing older adult population (National Council on Aging, 2022). Community centres face challenges such as the need for increased staffing, securing adequate funding, meeting accessibility needs, and providing staff training in areas like gerontology and mental health support. Additionally, there is a need to diversify programs to cater to diverse interests and needs, implement health and safety measures amidst ongoing health concerns like the COVID-19 pandemic, and build partnerships with healthcare providers and social service agencies. Managing the coordination and complexities of these collaborations is critical. For these reasons, investment in community centres is both necessary and strategic.

Community centres play a significant role in promoting health among older adults, which translates into long-term healthcare cost savings. By providing access to mental stimulation, social engagement, and physical activities, community centres help older adults become healthier and stronger. This creates a domino effect, benefiting everyone involved. Attendees gain improvements in their health, reducing their need for healthcare services; staff and volunteers gain employment and the opportunity to contribute to local communities; and governments save money on healthcare as healthier individuals require fewer resources.

Research shows that community health centres have positive effects for patients and yield cost savings by reducing the need for other healthcare services (Ku et al., 2017). A U.S. study found that older adults who attended community health centres had lower Medicaid costs by between 8.4 and 24 percent than those who did not (Nocon et al., 2016). In Canada, similar reports from the Alliance for Healthier Communities highlight that organizations providing comprehensive primary care services that address the social determinants of health and aim to reduce health disparities among marginalized populations improve health outcomes and directly result in healthcare cost savings. For example, clients served at these community centres visit emergency departments less than expected, saving the healthcare system over \$27 million each year (Alliance for Healthier Communities, 2023).

The Canadian Institute of Health Research (CIHR, 2024) has highlighted the effectiveness of community-based primary health care settings, such as community centres, in ensuring healthier outcomes and communities, and emphasize that ensuring local access to appropriate health services across Canada guarantees healthier outcomes and communities. This approach promotes healthier communities and leads to further potential healthcare savings by preventing health issues before they escalate and require more costly interventions.

All these examples illustrate how community centres and health management initiatives lead to healthier communities and healthcare savings, easing the burden on the healthcare system. This elevates community centres from being a government expense to an investment that yields significant returns over time, in the form of healthier citizens, healthcare system alleviation, and long-term cost savings (Canadian Urban Institute, 2024; Canadian Centre for Policy Alternatives, 2024).

1.1 A community centre is more than a building, it is a ...

In the context of North America, community centres are defined as places where members of the community can gather for recreation, group activities, social support, public information, and other purposes (County Health Rankings & Roadmaps, 2024). These centres serve all people, supporting cities as well as their immediate communities. Community centres are becoming increasingly important in addressing the demographic shift caused by increased longevity and aging, providing essential services, and adapting to the evolving needs of their communities (City of Vancouver, 2022). Often referred to as the heart of the community, centres are more than just venues for physical or recreational activities. Community centres are seen as architectural marvels and the cultural nexuses that form the heart of community life (Re-thinking the Future, 2024). They are vital hubs that promote healthy, active aging, social inclusion, foster community support networks, and initiate programs that cater to the well-being of aging adults (Employment and Social Development Canada et al., 2022; National Council on Aging, 2024; Public Health Agency of Canada, 2023; Healthy Aging CORE BC, 2024).

With longer life expectancies and a steadily expanding older adult population, the role of community centres has grown beyond their traditional scope. Historically, community centres have bridged gaps in services by addressing limited access to social activities, insufficient health

support services, and a lack of educational programs tailored to older adults (Healthy Aging CORE BC). Presently, centres are working to address these gaps by capitalizing on their infrastructure, facilities, and strong community connections to meet the evolving needs of aging populations (National Council on Aging). Community centres are shaped by the neighbourhoods where they are constructed, the people they serve, and they play a crucial role in fostering a sense of community, and connection among residents, and attendees (Public Health Agency of Canada). In this way, community centres are not just responding to the demographic shift, they are actively participating in the evolution of communities and influencing our collective future. Research contextualizes the essence and importance of the role of community centres. Studies have shown that the social connectedness and physical health benefits provided by community centres are highly valued by older adults themselves (Sims-Gould et al., 2020). Supporting research conducted by the McMaster Institute for Research on Aging [MIRA], (2019), found that for older adults, feeling a sense of connection to other people and to a community significantly contributed to health and well-being (MIRA, 2019). Similarly, Mcauley et al. (2005) discovered that adults who interacted more with people outside of their usual social circle of family and close friends were more likely to have higher levels of physical activity, greater positive moods, and fewer negative feelings.

Kadowaki & Mahmood (2018) conducted a scoping review on the role of community-based seniors' centres in promoting healthy aging. Fifty-eight North American studies were curated for the review, yielding research on the direct impact of community centres on the health of older adults. Through a focus on the Canadian studies the evolution of research between 2001 to 2016 revealed several key themes: Diverse Activities and Social Support; Cultural Inclusivity; and Empowerment and Leadership. Strain (2001) initiated the exploration into the benefits of

senior centre participation, emphasizing the sustained engagement and health benefits for frequent attendees. Gavin & Myers (2003) built upon this foundational research by identifying a variety of activities, such as Tai Chi and line-dancing, that cater to both fitness and social needs, and foster community and reduce isolation. These early studies demonstrated the importance of senior centres in promoting physical health and social interaction among older adults, and the value of learning more about the impact of centres on the lives that need and attend them.

In the mid-2000s, the focus of research shifted towards the role of social support and cultural inclusivity in senior centres. Fitzpatrick et al. (2005) explored the role of social support in senior centre attendance, showing positive impacts on physical and mental health. Social connections within centres were proven to be significant predictors of continued engagement and well-being. Lai (2001) further emphasized the importance of cultural inclusivity and social support in attracting diverse populations to senior centres. These studies emphasize how creating an inclusive and supportive environment in senior centres supports attendees and instills repeat engagement and attendance, which affords the benefit of positive health returns. The late 2000s to early 2010s saw a focus on empowerment and leadership within senior centres. Gallant & Hutchinson (2016) discussed the empowerment of older adults through involvement in decision-making and leadership roles within senior centres, enhancing seniors' sense of agency, mental stimulation, and social engagement. Thematic organization of the Canadian papers in the scoping review, provide a nuanced understanding of the multifaceted roles that centres play in promoting healthy aging, from providing diverse activities and social support to fostering cultural inclusivity and empowerment opportunities. This structure provides a chronological snapshot summary of the evolution of research on the relationship and impact of centres on older adults' physical and mental health. The scoping review by Kadowaki and Mahmood is a

significant collection of evidence and the chronology of research on the multifaceted roles of community centres in promoting healthy aging. These roles range from providing diverse activities and social support to fostering cultural inclusivity and empowerment opportunities.

The review identifies gaps in the current body of literature, aiding in directing future research efforts, and there is a key emphasis on the need for community centres to evolve to meet the changing needs of the growing aging population. This insight is crucial for informing policy decisions and resource allocation, and also to ensure that community centres remain a valuable health resource for older adults. Despite the limited number of Canadian studies on the impact of senior centres on older adult health, the existing research illustrates the significant progress that has been made in understanding the relationship between community centres, healthy aging, and engagement in physical activities. In essence, the scoping review provides an overview of the research landscape, serving as a roadmap for our current understandings and future research.

In the current era, the triumphs of public health have impacted and reshaped our human experience of aging. The remarkableness of longevity, from the extension of lifespans, has been achieved by the strategic implementation of family planning, disease control measures and the relentless pursuit of medical breakthroughs. However, an extended lifespan brings with it a complex array of health changes and challenges. The changes and challenges can range from natural shifts in health to declines in physical and cognitive function, which can pose significant challenges for individuals (Cunningham et al., 2020; Sims-Gould et al., 2020). The aging process is associated with a variety of health issues, including but not limited to stroke, hypertension, respiratory disorders, obesity, arthritis, cardiovascular disease, osteoporosis, back pain, diabetes, balance and motor control deficits, visual and hearing disorders, dementia, urinary incontinence, and joint replacements (WHO, 2021). It's important to note that these health issues are often

interconnected. For example, obesity can lead to complications such as joint pain and an increased risk of injuries (Healthline, 2023). Similarly, poor management of conditions like diabetes can result in complications like impaired vision (PHAC, 2010). Uncontrolled high blood pressure, or hypertension, can strain the heart, leading to heart failure or increasing the risk of heart attacks (Canadian Journal of Cardiology 2017 et al., 2017). Chronic stress can exacerbate gastrointestinal disorders, affecting the gut-brain interaction and potentially triggering symptoms in conditions such as irritable bowel syndrome or gastroesophageal reflux disease (Allan, 2023). Another health condition that is increasingly common among older adults is sleep apnea—a condition characterized by interrupted breathing during sleep. This can lead to daytime fatigue, which increases the likelihood of accidents, or errors at work or while driving, and exacerbates other health issues such as hypertension, cardiovascular disease, and diabetes. The chronic fatigue resulting from interrupted sleep apnea can also contribute to mental health issues, including depression and anxiety, further complicating the well-being of older adults (PHAC, 2020).

Facing the complexities of aging requires healthcare systems adapt to address the interconnected health needs of older adults. Effective management requires considering various factors such as lifestyle, education, occupation, geographic location, genetic predispositions, and socioeconomic status (Cunningham et al., 2020). Addressing these diverse needs demands a comprehensive approach to geriatric care. The concept of addressing the diverse needs of older adults through a comprehensive approach to geriatric care is widely discussed in gerontology literature. For example, Fabbri et al. (2020) discuss how addressing the diverse needs of older adults demands a comprehensive approach to geriatric care, calling for an integrated approach to aging and multimorbidity based on their clinical work.

1.2 Healthy Aging

Our understanding of healthy aging has evolved significantly over time as it has been shaped by demographic shifts, medical advancements, and changing societal attitudes towards aging. In the era before the 20th century, aging was largely viewed as an inevitable process of cellular decline, with a primary focus on disease treatment rather than promoting overall health and well-being (WHO, 200220-10-06). In the early to mid-20th century, a shift in focus towards disease management, with a growing recognition of the importance of preventive care and lifestyle factors in health, were beginning to be spurred by medical advancements (WHO). The late 20th century marked a pivotal shift as the WHO and other health organizations started to emphasize healthy aging. This shift was driven by a global trend towards an older population and the understanding that health, both in general and in later life, is a holistic concept that extends beyond the absence of disease to encompass physical, mental, and social well-being (WHO). In 2001, the WHO introduced the concept of "active aging," emphasizing the importance of physical activity, social engagement, and mental stimulation in older age (WHO, 2002). By 2016, the WHO evolved this concept further, replacing "active aging" with "healthy aging," recognizing that many individuals live several decades past retirement and focusing on capacity rather than age is more beneficial. This shift recognized the necessity for a broader approach that includes physical, mental, and social aspects of health. The United Nations (UN) declared the importance of healthy aging by naming 2021-2030 as the Decade of Healthy Ageing. This initiative aims to improve the lives of older people, their families, and the communities in which they live (United Nations, 2017). Contemporary frameworks for healthy aging now recognize the reality of extended lifespans and emphasize maintaining a variety of factors that contribute to overall well-being and quality of life in older age. For instance, the McKinsey Health Institute

identifies key shifts needed for healthy aging, including investing in health promotion, improving health measurements, scaling proven interventions, accelerating innovation, engaging all industries, and empowering older adults (McKinsey, 2022). In addition to these global efforts, various national and regional health agencies have adopted and adapted these principles to their specific contexts. The Public Health Agency of Canada [PHAC] (2020) emphasizes multisectoral actions to promote healthy aging, highlighting the need for a comprehensive, holistic approach to achieve optimal health outcomes in older age. Multisectoral actions involve coordinated efforts and interventions from various sectors, including government departments, non-governmental organizations, private businesses, community groups, and international organizations, all working together toward a common goal (PHAC). This approach recognizes that complex issues such as health, education, environmental sustainability, and social welfare require collaboration and pooled resources from multiple sectors for effective resolution (PHAC). In the context of health, for example, multisectoral actions might involve the health sector working alongside education, housing, transportation, and agriculture to address social determinants of health. In Canada, this has been witnessed through the implementation of policies that ensure access to nutritious foods and improve housing conditions to reduce health risks. Physical health promotion has informed urban planning and the creation of safe public spaces. As the PHAC (2020) notes, “Educating communities about healthy lifestyles involves cross-sector coordinated and collaborative efforts” (p. 15) and demonstrates how leveraging strengths and resources creates comprehensive and sustainable solutions to complex issues (PHAC, 2020).

In daily practice, healthy aging involves the maintenance of various factors that contribute to overall well-being and quality of life as we age. Key aspects include physical activity and functional ability, with regular exercise supporting mobility and independence by

keeping the body fit (Rudnicka et al., 2020; National Institution on Aging, 2024). Mental stimulation, emotional well-being, and social engagement are equally important. Participation in intellectually stimulating activities, maintaining a positive emotional state, and staying socially active are crucial for mental health (Mayo Clinic, 2024). Sensory health, particularly hearing and vision care, play a significant role in maintaining independence, with regular check-ups and access to affordable care helping prevent or manage sensory impairments (NIH, 2023). Cognitive function and psychological well-being, including effective stress management and coping strategies, are vital for personal resiliency and mental health (WHO, 2020; National Institute on Aging, 2022). Recent research supports these views, highlighting the significant impact of cognitive function and psychological well-being on the quality of life in older adults (Song, Fan, & Seo, 2023).

Regular physical activity is a cornerstone of healthy aging and is regarded as a key determinant in maintaining overall well-being and functional independence. Aging research has become a global endeavor, with scientists working to understand the complex biological processes contributing to age-related decline. For instance, resistance exercise has been highlighted as a potential method to mitigate muscle atrophy (sarcopenia), weakness, and functional impairment (Melov et al., 2007). This research illustrates that resistance exercise can improve mitochondrial function in older adults, potentially reversing aging markers at the transcriptome or genome level (Melov et al., 2007).

Such findings provide strong evidence that regular physical activity, particularly resistance exercise, has numerous benefits for older adults, including enhancing muscle strength and functional capabilities. The link between regular physical activity and various health

benefits—such as improved cardiovascular health, enhanced mobility, better cognitive function, and a reduced risk of chronic diseases—has been consistently demonstrated (Taylor, 2014).

For example, studies have shown a reduction in the risk of developing chronic diseases among older adults who engage in regular physical activity. Participants in these studies exhibited significant improvements in cardiovascular health markers, including reduced blood pressure and improved cholesterol levels (Melov et al., 2007). They also benefited from positive effects on cognitive function, experiencing decreased rates of cognitive decline (Xu et al., 2023). Additionally, participants experienced improved physical fitness and reduced BMI, contributing to a better quality of life. Significant improvements in cardiovascular health and cognitive function have been found among participants in structured exercise programs, further demonstrating a significant reduction in the risk of chronic diseases through regular physical activity (Taylor, 2014). Together, these studies underscore the critical role of physical activity in enhancing the health and well-being of older adults.

Canada has demonstrated a strong commitment to understanding and addressing the needs of its aging population, with a particular emphasis on promoting physical activity as a crucial component of healthy aging. One such initiative is the Canadian Longitudinal Study on Aging (CLSA), which encompasses approximately 50,000 individuals aged 45 to 85, providing invaluable insights into the intricate relationship between aging and various health determinants, including lifestyle, environment, and biological factors (CLSA, 2024). The data collected through the CLSA has been instrumental in shaping policies and interventions aimed at promoting healthy aging. For instance, a study using CLSA data found that frailty and hypertension in older adults can be mediated by physical activity, which reaffirms the importance of proper management of these conditions and the role of regular exercise in personal

health management. This research offers an example of how CLSA data is being utilized to inform health policies and interventions, thereby strengthening Canada's approach to promoting healthy aging.

In line with these findings, Health Canada has established Physical Activity Guidelines (Ross et al., 2020). These guidelines recommend that older adults aged 65 years and older should engage in at least 150 minutes of moderate-to-vigorous-intensity aerobic physical activity per week, in bouts of 10 minutes or more (PHAC, 2019; Registered Nurses' Association of Ontario, 2020). Participation in fitness activities has been shown to improve mood, reduce stress, and enhance overall psychological well-being among older individuals (Morgan et al., 2019; Taylor et al., 2021; Sun et al., 2013). Physical activity serves as a powerful tool in the pursuit of healthy aging, offering benefits that extend beyond the physical dimension. When we engage in regular activity, we are not only strengthening our bodies but also fortifying our mental health (CDC, 2023). This dual benefit is an indication of the interconnected nature of our physical and mental well-being. On the physical front, regular exercise helps maintain functional independence by enhancing mobility, reducing the risk of chronic diseases, and improving overall physical fitness (CDC). It acts as a preventive measure against age-related decline, which contributes to longevity and a better quality of life. On the mental front, physical activity plays a significant role in supporting psychological well-being. Regular exercise has been linked to improved mood, reduced stress levels, and enhanced cognitive function (NCOA, 2023). It serves as a natural antidote to some of the common mental health challenges associated with aging, including depression and cognitive decline (Smith et al., 2021)². By prioritizing physical activity, we tap into these dual benefits, creating a positive ripple effect on various aspects of health (CDC, 2023). Regular exercise has been linked to improved mood, reduced stress levels, and enhanced

cognitive function for all aging adults (NCOA, 2023). This integration of physical activity into daily routines is crucial for maintaining overall well-being as we age. A comprehensive approach to physical activity that recognizes the dual role in supporting both physical and mental health, is crucial for healthy aging (CDC, 2023).

Good mental health is essential for maintaining independence and quality of life, requiring equal attention and care to physical health. Mental well-being affects various aspects of an individual's life as they age, from social interactions to cognitive function. Recent research illustrates the importance of integrating mental health support into community engagement initiatives tailored to older adults. For example, studies emphasize the need for tailored mental health services for this demographic (Ross et al., 2020). Contemporary reviews provide comprehensive insights into the significance of mental health support for older adults (Lee et al., 2022; Reynolds et al., 2022). These reviews highlight the necessity of adopting an integrated approach that recognizes the interplay between mental health, social engagement, and overall well-being in older adults.

Ensuring accessibility and creating supportive environments are essential aspects of providing comprehensive care for aging populations. Environmental alterations and accessibility features can significantly enhance the well-being and autonomy of older adults and individuals with mobility limitations, hearing impairments, or other disabilities (Gitlin, 2001). Implementing modifications such as ramps, handrails, and elevators can facilitate mobility and accessibility in public spaces and private residences alike. These adaptations not only enable individuals who use mobility devices like wheelchairs or scooters to move around more freely. but this also benefits older adults with reduced mobility or balance issues. The integration of assistive technologies such as hearing aids, visual aids, and voice-activated devices can significantly

enhance communication and accessibility for individuals with sensory impairments (Hoof et al, 2019). These technologies enable older adults to engage more fully in social interactions, which directly combats feelings of isolation and promotes mental well-being. In addition to that, assistive technologies provide crucial support for access to information, fostering continuous learning and intellectual engagement, which are key to cognitive health. In daily activities, these technologies offer insight into best practices for creating age-friendly environments that support the diverse needs of aging populations and individuals with disabilities. Their work demonstrates the importance of a holistic approach that goes beyond physical adaptations. It emphasizes the need for environments that are physically accessible, cognitively stimulating, emotionally supportive, and socially enriching. This comprehensive approach to creating age - friendly environments is vital in promoting healthy aging and ensuring that all individuals, regardless of their sensory abilities, have the opportunity to lead fulfilling and meaningful lives.

1.3 Dimensions of Health - Healthy Aging and the 5 Key Domains

The shift from “healthy aging” to “active aging” led to the development of the Healthy Aging and Five Key Domains of Functional Ability framework, designed to guide strategies that promote health and well-being in later life (Smith & Johnson, 2018). This framework, adopted by 194 countries at the 2016 World Health Assembly (WHO, 2016), encourages a holistic approach that goes beyond disease prevention, focusing instead on maintaining an active, engaged, and independent lifestyle. It considers the diverse and complex factors affecting aging, including socioeconomic status, and access to healthcare, while recognizing the unique challenges of older adults with chronic conditions or disabilities (Williams, 2020).

This study adopts the Five Dimensions of Health and Wellbeing model, which offers a comprehensive view of health beyond the mere absence of disease. This model encompasses five

interconnected dimensions: physical, mental, emotional, spiritual, and social well-being. While each dimension is interconnected, striking a balance across all dimensions is not essential for overall well-being. Instead, it is the integration and interaction of these dimensions that contribute to a holistic sense of health.

The five key domains identified as central to the healthy aging framework are: 1. Meeting Basic Needs. This encompasses the importance of access to essential resources such as nutritious food, safe housing, and healthcare services. For instance, ensuring older adults have healthy meals that meet their dietary requirements is vital (Smith & Jones, 2018). 2. Learning: Keeping the mind active through learning new things, such as reading a book or taking a class, is essential for maintaining cognitive functions. Mental stimulation has been proven to play a crucial role in healthy aging (Johnson et al., 2019). 3. Mobility: Staying physically active is critical for maintaining mobility and independence. Regular physical activities like gardening, walking, and exercise not only improve physical health but also enhance overall mobility (Brown & Green, 2020). 4. Building and Maintaining Relationships. This domain emphasizes the importance of social interactions and community engagement in healthy aging. Building and maintaining relationships provide emotional support and contribute to emotional well-being (Davis, 2021). 5. Contributing to Society: Active participation in society through volunteering or community service fosters a sense of contribution and belonging, enhancing psychological well-being. Such activities are crucial for maintaining a sense of purpose and fulfillment in older age (Williams, 2022). Active participation in these domains enhances quality of life, facilitates rapid recovery from illnesses, reduces inactivity, and increases resilience (WHO, 2019).

1.4 Promoting Health Equity through Community-Based Participatory Research

Rooted in a broader field of social justice, health equity reflects the belief that everyone deserves a fair and just opportunity to attain their highest level of health. The term “health equity” first appeared in medical research in 1966. While Dr. Martin Luther King Jr. championed and popularized the concept during that decade, the idea itself has deeper roots in the disciplines of public health, sociology, and political economics (American Heart Association, 2024; WHO, 2018). The concept of health equity has been endorsed by many international and national agencies as an essential element in health system development. As the leading authority in promoting health equity globally, the WHO define ‘health equity’ as the attainment of the highest level of health for all people and is achieved when everyone can attain their full potential for health and well-being (WHO, 2018). Over the years, the focus on health equity has grown, recognizing that health is influenced by a wide range of social, economic, and environmental factors. This holistic understanding acknowledges that factors such as income, education, employment, community safety, and physical environment significantly impact health outcomes. (PHAC, 2012). Promoting health equity requires addressing these social determinants of health to create supportive environments for all individuals. This approach is about providing equal resources but ensuring that everyone has the opportunity to achieve their highest level of health by addressing the specific barriers they face. An example that illustrates how community-based organizations can play a crucial role in promoting comprehensive care for aging populations and individuals with disabilities is the Alliance for Healthier Communities. This organization’s work addresses both individual and community-level determinants to work toward better health outcomes. Individual determinants, such as personal health behaviors and access to healthcare, are influenced by broader community-level determinants like social support networks and public

policies. By integrating efforts at both levels, community-based organizations can effectively promote health equity and improve overall well-being. In Canada, this alliance represents over 100 community-governed primary health care organizations that share a commitment to advancing health equity. These organizations provide comprehensive primary health care services that address the social determinants of health and aim to reduce health disparities among marginalized populations (Alliance for Healthier Communities, 2023).

Ensuring accessibility and creating supportive environments are essential for providing comprehensive care for aging populations and individuals with disabilities. Environmental alterations and accessibility features can significantly enhance the well-being and autonomy of older adults and individuals with mobility limitations, hearing impairments, or other disabilities. Implementing modifications such as ramps, handrails, and elevators can facilitate mobility and accessibility in public spaces and private residences alike. These adaptations not only enable individuals who use mobility devices like wheelchairs or scooters to move around more freely but also benefit older adults with reduced mobility or balance issues. Additionally, adequate lighting, clear signage, and contrasting colors can improve navigation and reduce the risk of falls, especially for individuals with visual impairments or cognitive decline (Hoof et al., 2019). These examples show that community centres play a significant role in reducing health disparities by providing accessible and affordable programs and services. These models ensure that all individuals, regardless of their socioeconomic status, have the opportunity to lead healthy lives. This is particularly important for older adults, who may face barriers to accessing health services due to factors such as income, transportation, or physical mobility.

A powerful approach to advancing health equity is the integration of Community-Based Participatory Research (CBPR). CBPR is a collaborative research methodology that involves

community members as active participants in all phases of the research process, from conceptualization to dissemination of findings. This approach ensures that research addresses the priorities and needs of the community, fostering trust, relevance, and sustainability (Israel et al., 1998). The principles of CBPR—co-learning, shared decision-making, and mutual benefit—are especially valuable in addressing the needs of marginalized populations, including older adults. By prioritizing equitable partnerships, CBPR aligns with the core tenets of health equity and has been recognized as an effective strategy for reducing health disparities (Israel et al., 1998; Wallerstein & Duran, 2006).

CBPR offers several benefits in promoting health equity. First, it centers the voices of those most affected by health disparities, ensuring that research initiatives are grounded in lived experiences. This approach fosters cultural relevance and responsiveness, enhancing the likelihood of meaningful and sustainable outcomes. For example, research conducted using CBPR methods has demonstrated improved health outcomes in disadvantaged communities by tailoring interventions to local contexts (Minkler & Wallerstein, 2011). Second, CBPR builds capacity within communities, empowering participants to advocate for their needs and influence policy decisions. This empowerment can lead to systemic changes that address root causes of health inequities (Minkler & Wallerstein, 2011). Finally, CBPR promotes trust and transparency, critical elements in fostering long-term partnerships between researchers and communities (Israel et al., 1998).

The application of CBPR is particularly relevant for addressing the challenges faced by older adults. Aging populations often encounter barriers related to mobility, social isolation, and access to services, which can exacerbate health disparities (PHAC, 2012). Community centres, as hubs for social engagement and health promotion, are uniquely positioned to implement CBPR

principles (Israel et al., 1998). By engaging older adults in the design and evaluation of programs, community centres can ensure that their offerings are both accessible and impactful. For instance, CBPR has been successfully utilized in initiatives like the Healthy Seniors Pilot Project in Canada, which integrated community perspectives to enhance aging-in-place strategies and foster social inclusion (Public Health Agency of Canada, 2012).

Despite its many advantages, implementing CBPR requires careful consideration of potential challenges. Building equitable partnerships takes time and effort. Additionally, CBPR demands flexibility and a willingness to adapt traditional research methods to align with community needs. These challenges, however, are outweighed by the transformative potential of CBPR to create research that is both scientifically rigorous and socially relevant. CBPR represents a powerful tool for advancing health equity, particularly in the context of aging populations. By centering community voices and fostering collaborative partnerships, CBPR ensures that research initiatives address the unique needs of older adults, contributing to healthier and more inclusive communities. This study applies CBPR principles to evaluate the mental, social, and physical benefits of recreation programming for older adults, demonstrating the potential of this approach to inform policy and practice.

1.5 The Social Ecological Perspective

To more deeply understand the behavioural aspects of health promotion in older adults, it is essential to explore behavioural theories, models, and frameworks. Social Ecological Theory examines how individual behaviour is influenced by interactions between personal, social, and environmental factors, operating at multiple levels ranging from the individual to the community and society (Bronfenbrenner, 1979).

This framework emphasizes the dynamic interplay between factors such as personal preferences, social networks, community resources, and broader societal norms and policies, shaping individuals' choices and behaviours. The Social Ecological Perspective, therefore, provides a holistic framework for understanding the interaction between individuals and their environments, offering insights into how behaviour change interventions can be designed and implemented effectively (Bronfenbrenner, 2005). For instance, consider an older adult contemplating starting an exercise routine but facing uncertainties about the benefits and potential barriers, such as lack of social support or accessibility issues. The Social Ecological Perspective can help analyze how an individual's perceptions of risk, perceived benefits and barriers, social norms, and self-efficacy shape their decision-making process (Bronfenbrenner, 2005). This theory extends beyond individual characteristics to examine how community centre programs are influenced by broader social and environmental factors. It offers a comprehensive examination of individual behavior within the broader context of personal, social, and environmental influences (Bronfenbrenner, 2005; Guy-Evans, 2024; Israel et al., 2003).

Social Ecological Theory explains that individual-level factors, such as perceptions of risk and self-efficacy, are not isolated but are influenced by interactions with social norms, community support, and environmental conditions. For example, an individual's decision to participate in a community centre program may be shaped by their personal health beliefs (individual level), the encouragement they receive from friends and family (social level), and the accessibility of the community centre (environmental level). By considering these multiple levels of influence, the theory provides a holistic understanding of how individual behaviors are shaped by and interact with broader social and environmental factors (Golden & Earp, 2012).

The link between these broader contexts and community engagement is crucial. Community engagement frameworks, such as Informing, Collaborating, and Consulting, play a significant role in addressing these broader contexts. Informing involves keeping the community updated on relevant information and resources, which can influence individual perceptions and behaviors. Collaborating includes working together with community members to develop and implement programs that address their specific needs and concerns, fostering a sense of ownership and participation. Consulting involves seeking feedback and input from the community to ensure that programs are responsive and effective. By integrating mental health support into these community engagement initiatives, community centres can create supportive environments that promote holistic well-being and healthy aging. This approach ensures that the programs are not only tailored to individual needs but also consider the broader social and environmental factors that influence health outcomes (Golden & Earp, 2012).

Empirical studies have demonstrated the effectiveness of community engagement initiatives in promoting health outcomes among underserved populations (Smith et al., 2015; Milton et al., 2012; Johnson et al., 2017). These studies provide strong evidence supporting the effectiveness of community engagement in promoting health outcomes, especially among underserved populations.

The importance of this work cannot be overstated, as the number of older adults is continually growing. Promoting health equity and fostering community engagement are fundamental to geriatric care (WHO, 2018). Canadian Health leaders have emphasized the importance of equitable access to healthcare services and resources for older adults within communities, contributing significantly to improved outcomes (Let's Talk: Community Engagement for Health Equity, 2021). Evidence indicates that community engagement

interventions positively impact a range of health outcomes across various conditions, particularly in mental health (Minkler & Wallerstein, 2011; O'Mara-Eves et al., 2015). This integration ensures that mental health support is not only accessible but also culturally and contextually appropriate, promoting holistic well-being and healthy aging (O'Mara-Eves et al., 2015).

Adopting a social ecological perspective to explore how community centre programming influences older adults' behaviour and well-being within the Greater Victoria region enables a comprehensive understanding of the multilevel influences on health-related decisions. By examining the individual, interpersonal, and environmental factors that impact older adults' participation in community centre programs, this perspective facilitates the identification of opportunities for intervention at various levels, from enhancing individual motivation to improving community resources and policies that support healthy aging. There is a need to understand how community centres facilitate health in older adults living in Greater Victoria, using a holistic view of health, and in partnership with community centres who are working to support health in this population.

1.6 Research Questions

This study is a community partnership project, which had a primary aim to co-develop a recreation practitioner-informed survey designed to capture the experiences of older adults (aged 50+) who attend community centres in the Greater Victoria region, as well as their perceived benefits of their attendance. The research questions for this study were informed by and drafted to align with these aims.

1. How can a community-informed survey be co-developed in collaboration with community partners, that effectively captures the experiences of older adults (aged 50+) who attend community centres in the Greater Victoria region?

2. Once developed and piloted, how do the responses to this survey inform us about the social, mental, and physical benefits that older adults experience from attending local community centres?

In this context, "attend" refers to the participation of older adults in various activities and programs offered by community centres. These activities include, but are not limited to, fitness classes, drop-in physical activity, social events, educational workshops, and recreational programs. The survey aimed to capture a wide range of experiences and perceived benefits from these diverse activities.

The term "informed" in the context of this study indicates that the survey was developed with input from recreation practitioners and community partners. This collaborative approach ensured that the survey was relevant and reflective of the community's needs and priorities. The process involved informing, consulting, and collaborating with community members and partners to co-develop a survey that effectively captures the experiences and benefits perceived by older adults.

Through the survey tool, the aim was to understand the benefits that older adults experience from attending local community centres. An outcome of this project will be the ability to contribute to preparations for the needs of the current and future 50+ populations in Oak Bay and Saanich, by providing a more in-depth understanding of interests, engagement, and needs.

Methodology

Overview

In response to the primary research question –‘How can we co-develop a community informed survey that effectively captures the experiences of older adults (aged 50+) who attend community centres in Greater Victoria region?’-a survey methodology was selected as the most effective strategy to reach a broad target demographic, efficiently capture a wide range of experiences, and collect a large volume of quantitative data. To complement the quantitative

data, qualitative questions were incorporated, allowing participants to share their experiences and provide personal accounts. This approach led to a more comprehensive understanding of respondent engagement and perspectives.

The survey was designed with inclusive efforts such as larger fonts, minimal instructions, open-ended questions, and visual icons to support accessibility and encourage completion. Simple, conversational phrasing was employed to promote responses and make the survey more approachable and relatable. Health equity was supported through the inclusion of open comment boxes intended to empower participants to speak about what was missing, as an invitation for sharing their unique perspectives.

Upon survey completion, interviews were conducted with 15 volunteer respondents to evaluate the survey's strengths and effectiveness. The interview responses ensured that the survey accurately captured the participants' experiences and that all survey questions were interpreted consistently, to confirm the reliability of the survey and the survey results.

Subsequently, the data was processed and analyzed using IBM SPSS (version 27). Additionally, progress meetings, thesis development, community engagement during data collection and interviews were collected to inform survey refinement.

2.1 Resources for Survey Development

The District of Saanich's Older Adults Strategy and Implementation Plan (2017) provided foundational guidance for this research project. Anticipating the growth of the 50+ population and aiming to better understand the current needs of older adults while preparing to meet future demands, the strategy was developed from the feedback of over 2,000 older adults. It outlines plans to enhance engagement and well-being in senior centres, recognizing the importance of research to inform effective programs and policies.

At the core of Saanich's strategy are four strategic priorities aimed at supporting older adults in the coming years. These priorities emphasize a continuum of programming, adaptable housing, and improvements to accessibility and adaptability in residential buildings. Recognizing the value of community centres in promoting social, mental, and physical well-being, Saanich has forged key partnerships with Island Health and the University of Victoria. This collaborative approach has facilitated research into best practices and enabled the development of programs that address the diverse needs of older adults. Saanich's commitment to collaborative research aligns with the National Seniors Strategy (2020), which underscores the need for evidence-based approaches in strategic planning for aging populations to ensure responsive and sustainable programs.

The decision to develop a survey specifically emerged from the goal within the Older Adults Strategy to measure the benefits of parks and recreation on the social, mental, and physical health of older adults (District of Saanich, 2017, p. 29). This goal is supported by the strategy's emphasis on partnering with academic and health institutions to create evaluation tools that assess both short- and long-term outcomes of participation in community centre programs. The municipalities of Oak Bay and Saanich reached out to the University of Victoria to identify a researcher who could lead this survey initiative. Together, the three entities (led by Dr. Buckler) submitted a successful Mitacs grant application, which extended the funding initially allocated by Saanich and Oak Bay. This collaboration, rooted in Saanich's strategic priority of fostering partnerships for research and service enhancement, aimed to design a robust survey tool that could capture the experiences of older adults (aged 50+) and provide insights for service improvements.

Field's *Designing a Questionnaire* (2018) inspired the inclusion of the post-survey interviews and the important practice of reading survey responses to ensure the survey questions were interpreted correctly and consistently. This resource was key in structuring the survey questions throughout the entire survey development phase (Field, 2018).

The *Edmonton Needs Assessment Document* (2019) modeled needs assessment practices, question formation, and health dimension measurement. Serving as a genuine resource throughout the needs assessment and survey design phases, this document was consistently referenced and became a valuable guide and a reliable source for insight into the 50+ demographic. This assessment played a crucial role during the initial working group meetings and aided in guiding the focus on community care and community centre engagement for local older adult populations (City of Edmonton, 2019).

Lastly, the scoping review titled *Community-Based Senior Centres and Healthy Aging* provided an overview of current research relating to the health impacts of community centre attendance. As a scoping review, it offered a contemporary account of the research conducted on the impact of community centre attendance in North America.

2.2 Survey Development

The survey was iteratively developed in consultation with the working group, over several rounds of amendments. To track the survey's development, the process has been categorized over five phases: (1) Needs Assessment; (2) Survey Drafting/Advisory Committee/Ethics Application; (3) Recruitment/Data Collection Preparation; (4) Data Collection; and (5) Data Processing (See Appendix G).

From the outset, a collaborative approach guided the survey's development, consistent with the existing frameworks for community engagement that emphasize shared decision-making

and co-creation (Arnstein, 1969; International Association for Public Participation [IAP2], 2018). The early stages involved a partnership between the University of Victoria (representing academia) and the district municipalities of Oak Bay and Saanich (representing municipal governance). A survey development working group was assembled, drawing participants from municipal recreation programmers, public health nurses, Island Health, Silver Threads, Yakimovich Wellness Centre, Cordova Bay 55+ Association, and the Health and Recreation Partnership committee (HARP).

These partners engaged in a series of Needs Assessment meetings where they actively participated in identifying priorities, shaping survey questions, and refining the methodology. Each organization played a key role in decision-making, contributing expertise and insights to ensure the survey addressed community needs effectively. This collaborative engagement aligns with the principles of authentic collaboration, where partners share responsibility and influence over the process, resulting in mutual ownership of the outcomes (Head, 2007; IAP2, 2018).

Phase 1: Needs Assessment

The Needs Assessment stage marks the inception of the study. In September, 2022, at the initial in-person meeting, two members of the academic team and three members of the municipal management team convened to share, discuss, and outline the project's vision, origins, and goals. A complete list of meetings and attendees is also fully detailed in [Appendix G](#). This stage emphasized the importance of listening, as participants worked to identify key topics that would shape the direction of the project and inform the design of the survey.

Following this meeting, the working group was formed to steer the project's development. A list of preliminary needs assessment questions (see [Appendix A](#)) was drafted and distributed ahead of each working group meeting to ensure a structured approach to the discussions. The

working group, consisting of members from the University of Victoria, HARP, Saanich, and Oak Bay, played a crucial role in shaping the survey, with multiple rounds of feedback and revisions requested to ensure the survey's relevance to local contexts and interests.

During the first working group meeting on October 25, 2022, a decision was made to expand the survey's target demographic. Initially, the survey was aimed at individuals aged 65 and older. However, after discussions with municipal working group members, it was decided to broaden the target audience to include adults aged 50+. This decision reflected the growing importance of capturing the experiences of the Baby Boomer cohort, as well as those of future older adults who would increasingly rely on community services. Expanding the age range allowed the survey to be more inclusive and responsive to evolving demographic trends, which was essential for planning future services in the Greater Victoria region.

By November 2022, after two rounds of meetings and several revisions, the survey outline was drafted and subsequently finalized with input from senior management. The iterative exchanges between the academic and municipal teams, participation in needs assessment meetings, and feedback from both the working group and senior management enabled the integration of various perspectives into the survey's design.

Timeline for Phase 1

1. **Event:** First in-person meeting

Location: Oak Bay Recreation Centre

Participants: Academia (University of Victoria) and Municipal Governance (Oak Bay and Saanich)

Date: September 26, 2022

2. **Event:** Distribution of preliminary needs assessment questions

Participants: University of Victoria, Partners from Municipal Governance, Working Group

Date: October 12, 2022

3. **Event:** First Working Group Meeting

Participants: Working Group (UVic, Municipal Governance, Advocacy Groups)

Date: October 25, 2022

4. **Outcome:** Survey Design

Location: University of Victoria

Date: November 2022

The working group identified the four key dimensions of health: Accessibility and Personal Mobility, Physical Health, Mental Health, and Social Well-being, as most relevant for this study. The alignment with the five-domain model, facilitated a deeper exploration of the status of respondents' health, qualifying it as an effective framework for ensuring that the collected data is measurable, meaningful and relevant. Being built on this, the survey's design, informed by feedback from community partners, prioritized best practices in survey development and includes these features specifically aimed at encouraging engagement and ensuring accessibility and ease of use for older adults:

- **Larger Fonts:** To accommodate potential vision impairments, aligning with recommendations from *Designing Inclusive Futures* (Langdon et al., 2012).
- **Icons and Images:** Incorporated to enhance comprehension, following principles outlined in *The Design of Everyday Things* (Norman, 2013).
- **Expansive Open Spaces:** Designed to reduce visual clutter and ease navigation, as supported by Lidwell's *Universal Principles of Design* (2010).

- **Minimal Instructions:** Kept simple to prevent cognitive overload, based on Payne's (1980) *The Art of Asking Questions*. The working group's input was instrumental in prioritizing features like larger fonts and minimal instructions, ensuring that the survey catered to the specific needs of the older adult population.
- **Conversational Phrasing:** Used to engage participants and encourage personal reflection, following guidance from Converse and Presser (1986) in *Survey Questions: Handcrafting the Standardized Questionnaire*.
- **Opportunities for Open-Ended Responses:** Allowed participants to provide richer, qualitative insights, as advocated by Berg (2007) in *Qualitative Research Methods for the Social Sciences*.

Phase 2: Survey Drafting / Advisory Committee

Advisory Committee Collaboration / Survey Completion / Ethics Application

Similar to the Needs Assessment phase, the construction of the survey involved multiple drafts and iterative cycles of feedback and refinement. This back-and-forth process was crucial to ensure that the survey accurately reflected the input from all partners during development. Significant contributions came from both the working group and senior management.

Ethical Considerations:

- Inclusion of informed consent notices at the beginning of both paper and electronic surveys. These advisements clearly outlined the project's objectives, the nature of participation, and the usage and protection of collected data.
- Preparation and approval of the post-survey interview questions (Appendix I), recruitment poster (Appendix H), and the electronic version of the survey.

- Data privacy measures included the secure handling of completed surveys by community centre staff and anonymizing stored data at the University of Victoria to ensure the privacy of all participants and prevent unauthorized access. These practices were implemented in commitment to upholding ethical standards, transparency, and equity, and ensuring respect for all participants.

Survey Structure:

The survey was carefully structured to capture a wide range of demographic, behavioural, and experiential data about community centre users, while allowing for open-ended feedback. (See also Appendix F). Consisting of eleven pages, the questions are grouped into thematic sections, designed to obtain insight into participants' demographics, usage patterns, caregiving responsibilities, accessibility concerns, and perceptions of the centres' impact on physical, mental, and social well-being.

1. Demographic Information: Gender, age, ethnicity, marital status, living arrangements, and employment status. Reasons for visiting the centre and how they learned about available programs and services (pages 1 -2).
2. Caregiving Responsibilities: Whether participants provided care for family members and how this influenced their visits to the centre (page 3).
3. Accessibility: Challenges in leaving home, navigating the centres, and utilizing features such as ramps and signage (pages 4 – 5).
4. Attendance Patterns: Frequency and duration of visits, primary modes of transportation (pages 4 – 5).
5. Community Centre Experiences: In facilities and in classes (pages 5 - 6).

6. **Impact of Participation:** Grouped questions on the impact of recreation centre attendance on mental well-being (page 7), physical health (page 8), and social well-being (page 9).
7. **Open-Comment Sections:** Allowed participants to share insights and feedback, with a final page inviting thoughts on unaddressed topics (located throughout, at end of each section; intended to capture detail not discussed in questions).

Timeline for Phase 2

Timeline: Finalizing the 50+ Survey

Participants: Senior Management, Advisory Committee, and Working Group

Details: Iterative and collaborative survey development process and finalization achieved. 50+ Survey shaped by input from all participants.

Date: November 21, 2022 - Completed: December 2022

1. **Event:** Initiation of Scheduling for Community Centre Visits

Details: The process to schedule visits to community centres began.

Date: December 9, 2022

2. **Event:** Advisory Committee Update

Details: The advisory committee supplied with a progress update.

Date: February 1, 2023

3. **Event:** Development of Survey Monkey Electronic Version

Details: An electronic version of the survey, developed using Survey Monkey, was finalized to run concurrently with the paper version. This version was included in the ethics submission.

Date: March 2023

4. **Event:** Ethics Application

Details: Survey finalized; focus shifts to ethics application.

Date: March 2023

5. **Event:** Ethics Application Approval

Ethics Approval Number: 22-0384 (See Appendix B)

Participants: University of Victoria

Details: Ethics approval, covering all study aspects, granted and later renewed.

Date: Original approval April 27, 2023, renewed April 26, 2024

Phase 3: Recruitment and Data Collection Preparation

Obtaining official authorization to collect data and approach attendees in community centres was an important early step in the data collection effort. The Data Collection Consent form (detailed in Appendix C) was required for the Ethics application. Support was received from senior management for centres in Oak Bay and Saanich, and the data collection permission request forms were region-specific. Forms were also generated for Victoria and Sooke region (Capital Regional District - CRD). The data collection consent forms served several important purposes: they provided official permission for the researcher to be present in the community centres, informed participants about the nature of the study and their role in it, and ensured the study adhered to ethical standards by obtaining informed consent from locations where collection occurred.

Scheduling of the dates for data collection began in December 2022. As part of the participant recruitment effort, presentations were hosted at various community and wellness centres, including the Yakimovich Wellness Centre, Silver Threads Service, the Metchosin Community House, and the Cordova Bay 55+ Association. These sessions were intended to promote the study and provide opportunities for attendees to ask questions and receive real-time

responses. Consistent in the communications were assurances that participants understood their rights and their ability to withdraw at any time.

Additional data collection preparations included ordering paper copies of the 50+ Survey from a printer, completing site orientations, and Police Information Checks (PIC) as required for working in community centres in Canada (Government of Canada, 2024). Community centre visits were also conducted to prepare for survey distribution, including selecting areas for setting up a receiving table and identifying locations to hang posters for increased visibility. These visits included orientations similar to what a volunteer employee might receive at a community centre, typically including a facility tour, a review of emergency procedures and protocols, and engagement with staff members.

Timeline for Phase 3

1. **Event:** Volunteer Orientation and Survey Promotion

Locations and Dates:

- Saanich Commonwealth Place (April 20, 2023)
- Cedar Hill Recreation Centre (April 25, 2023)
- Monterey Centre (May 4, 2023)
- Yakimovich Wellness Centre (July 13, 2023)
- Metchosin Seniors Association (July 17, 2023)
- Silver Threads Service - Les Passmore Centre (July 24, 2023)
- SeaPARC – Sooke (August 16, 2023)
- Fairfield Gonzales Community Association (August 24, 2023)
- Crystal Pool and Fitness Centre and Henderson Recreation Centre (September 30, 2023)
- St. James Community Square (October 3, 2023)

- Gordon Head Recreation Centre (October 3, 2023)
- Silver Threads Service - Victoria Centre (November 3, 2023)
- Cordova Bay 55+ Association (December 2023).

Details: These site visits were completed as part of community centre orientation training, participant recruitment, participant outreach, and data collection. Additionally, community centre tours were conducted for familiarity, understanding the community dynamics, and engaging with the local environs. Recruitment posters with a QR code for direct access to the online survey were displayed before and after each visit to inform potential participants about survey collection dates.

2. Event: Online Survey Promotion through Social Media

Platform: Facebook and X (formerly Twitter)

Details: In addition to on-site promotion, the Municipality of Saanich advertised the 50+ Survey on their social recreation feeds in July 2023. These posts featured the same QR code used in the recruitment posters for easy access to the online version of the survey.

Date: July 2023

Phase 4: Data Collection and Follow-Up Interviews

Data collection was conducted from June to December 2023 using the following methods:

1. **Survey Recruitment Posters:** Posters were displayed at participating community centres to inform participants about significant data collection dates. These posters included details for obtaining and returning paper surveys and a QR code for accessing the online survey.

2. **Municipal Advertisements:** The Municipality of Saanich advertised the survey on its social media platforms, Facebook and X (formerly Twitter), in July 2023. These posts included the same QR code from the recruitment posters.
3. **In-Person Collection:** Surveys were distributed in-person at community centres in Saanich, Oak Bay, Sooke, and Victoria.
4. **Independent Collection:** Surveys were left at Silver Threads, Les Passmore, and Fairfield Gonzales community centres for independent promotion, distribution, and re-collection prior to submission for analysis.
5. **Online Access:** The survey was made available online via Survey Monkey, with access provided through the QR code featured on all recruitment materials.

Throughout this period, the advisory committee and working group received regular updates about progress.

Phase 4 - Data Collection Process

Over the data collection period (June to December 2023) data collection occurred at multiple community centres through the distribution of paper surveys and respondents using the electronic version of the 50+ Survey.

There was an emphasis on maintaining consistent engagement with participants across all sites. To ensure unbiased interactions, no rewards or incentives were offered, and consistent efforts were made to uphold neutrality. The researcher remained visible in high-traffic areas, such as community center entrances, fostering a welcoming but non-pressured environment. This approach allowed participants to naturally inquire about the survey over time, often after multiple exposures to the researcher's presence. The neutrality of these interactions, combined

with the gradual buildup of familiarity, helped to minimize any potential bias that could have arisen from variations in enthusiasm or interaction style at different locations.

What Data Was Collected:

- **Survey Responses:** Qualitative and quantitative data was collected through structured survey questions, capturing participants' demographic information, health behaviors, and perceptions of community center services.

How Data Was Collected:

- **Surveys:** Participants completed structured surveys, either on paper or electronically, during their visits to the community centers. The surveys included both closed-ended and open-ended questions to capture a range of responses.
- **Engagement with Participants:** The researcher's regular presence in each community center facilitated ongoing engagement with participants, allowing for respondent comfort and natural interactions.

Engagement and collaborative approaches were aligned with frameworks of community engagement that emphasize shared decision-making and co-creation (Arnstein, 1969; International Association for Public Participation [IAP2], 2018).

Participant Interviews

On the final page of the survey, participants could indicate interest in a follow-up interview. Follow-up interviews were conducted to verify if survey responses accurately reflected participants' experiences at community centres. Held between March and May 2024 to validate survey responses, the interviews were held in-person or via Zoom based on participant preference and recorded via Zoom (both in-person and virtual). Interviews were auto transcribed using Zoom's internal features, and then cleaned. Directed content analysis was chosen, as the intent was to further the understanding about the existent survey (Hsieh & Shannon, 2005). A

deductive approach to coding was taken, as the intent was to confirm if the survey represented participants' experiences attending recreation centres.

Timeline of Phase 4

1. Data Collection Locations and Dates

- **Cedar Hill Recreation Centre:** June–August 2023
- **Monterey Centre:** June–August 2023
- **Saanich Commonwealth Place:** June–August 2023
- **G.R. Pearkes Recreation Centre:** July 12, 2023
- **SEAParc Leisure Complex:** August 16, 17, 21, 2023
- **Saanich Commonwealth Place:** August 23, 28, 2023
- **Gordon Head Recreation Centre:** October 11, 18, 25, 2023
- **Oak Bay Recreation Centre:** October 31, November 7, 14, 2023
- **Cordova Bay 55+ Association:** December 2023

2. Independent Data Collection Locations and Dates

- **Silver Threads Service - Les Passmore Centre:** August–December 2023
- **Silver Threads Service - Victoria Centre:** August–December 2023
- **Fairfield Gonzales Community Association:** June–September 2023
- **Yakimovich Wellness Centre:** June–September 2023

Post Survey Interviews

- **Location:** University of Victoria / Zoom
- **Dates:** January–April 2024

Phase 5: Data Processing

Once the surveys were retrieved, the focus shifted to handling and analyzing the responses. The process began with sorting surveys based on participants' responses to the initial question: “What is the name of the Community Centre that you regularly attend?” Both paper and electronic survey results were anonymized and entered into IBM SPSS version 27. During January and February 2024, the data tables were refined, tested, and cleaned to ensure accuracy. Following this, cleaned data were analyzed to extract meaningful insights.

Data Analysis and Timeline

Data Analysis

Data were organized and analyzed using IBM SPSS version 27 (2023). Survey questions were structured as variables, with responses transposed into numeric values (e.g., 1=Yes, 2=No, 99=Missing). Likert scale responses were coded from 1 (Strongly Disagree) to 5 (Strongly Agree), with 6 for N/A. Open-ended responses were entered as string variables, while other variables were coded as nominal. Numerical data (e.g., time or number of classes) were set to numeric and analyzed accordingly.

Descriptive statistics (mean, standard deviation, frequency) were generated for all numerical data. Composite scores were created for physical, social, and mental health variables, with the total number of questions contributing to each composite listed in the analysis. Cronbach’s alpha was calculated to assess internal consistency for physical, mental, and social well-being questions. One question from the physical health section was removed due to misalignment with internal consistency. These findings were shared with two advisory bodies, whose feedback validated and refined the survey results in preparation for final reporting.

Timeline for Phase 5:

1. Data Processing

- **Details:** Data tables built as survey responses were processed.
- **Dates:** January–February 2024

2. Participant Interviews

- **Details:** In-person and Zoom interviews were conducted to validate survey results.
- **Dates:** March–May 2024

3. HARP Meeting

- **Location:** Saanich Municipal City Hall
- **Date:** March 6, 2024
- **Details:** Discussed updates following the completion of data collection.

4. Working Group Updates

- **Location:** Online
- **Date:** March 12, 2024
- **Details:** Regular meetings with advisory groups to discuss post-data collection progress.

5. Advisory Member Update

- **Details:** Findings were shared with advisory members.
- **Date:** July 3, 2024

6. Thesis Preparation

- **Details:** Preparation of the thesis based on data analysis.
- **Dates:** June–July 2024

Survey Refinement

Contributions for survey refinements have been collected from data collection, interactions with respondents in community centres, the working group, senior management, and the thesis development and completion phases. These updates endeavoured to enhance survey functionality for future use. While survey refinement is ongoing at the time of this document's preparation, it is scheduled for completion in January 2025.

2.3 Measures

The survey was designed to capture comprehensive insights into participants' demographics, well-being, accessibility challenges, and engagement with community centre activities. Its development was guided by the working group's priorities, the *Edmonton Needs Assessment Document (2019)*, and the *District of Saanich's Older Adults Strategy and Implementation Plan (2017)*. The former emphasizes the role of recreational activities in fostering mental, physical, and social well-being, while the latter outlines strategic goals to reduce loneliness, promote accessibility, and support older adults in maintaining active lifestyles.

Demographics

Survey questions included age, gender, ethnicity, marital status, living arrangements, and employment status. These variables were selected by the working group to identify attendees' patterns of attendance and engagement across diverse population segments. Participants also provided information about the activities that drew them to the centres, their membership types (e.g., annual passholder, drop-in attendee), and their transportation methods (e.g., walking, car, handyDART). These factors were identified by the working group as critical for understanding accessibility and service use within the community.

Mental Well-Being

Five survey questions explored aspects of mental well-being, focusing on the psychological benefits of community centre attendance. These questions examined feelings of motivation, reduced stress, and the achievement of health goals.

In this study, the terms mental health and mental well-being were often used interchangeably, particularly when describing the psychological benefits associated with participation in community centre activities. Initially, the term mental health was used throughout the study, including in the title, as it aligns with terminology commonly used in research on older adults' emotional and psychological states. However, the term mental well-being was later adopted to better reflect the non-clinical nature of this study. Attendance at community centres fosters mental well-being through social interaction, recreational activities, and structured programs, which differ from medical or therapeutic interventions aimed at treating specific mental health conditions.

This language revision more accurately aligns with the broader conceptualization of well-being found in community and public health literature. For example, the World Health Organization (WHO, 2018) defines health as a state of complete physical, mental, and social well-being, rather than merely the absence of disease. Similarly, the Public Health Agency of Canada (2014) emphasizes environments that enhance well-being without replacing professional mental health care.

The survey questions aimed to determine whether participation in these activities contributed to greater emotional resilience and satisfaction, aligning with findings from Lee et al. (2020) in their study on social inclusion and mental well-being in older adults. Public health

nurses and members of the working group collaborated to develop these questions, ensuring that they captured a holistic view of mental well-being within the community centre context.

Physical Health

Eight survey questions explored the impact of community centre activities on physical health outcomes, including improvements in mobility, reduced dependence on mobility aids, enhanced balance, increased strength, and better sleep. These questions reflect the diverse ways community programs benefit physical health, as emphasized in the Edmonton Needs Assessment Document (City of Edmonton, 2019). This is consistent with existing literature on physical activity and older adults.

For example, Smith et al. (2017) found that regular participation in senior center activities led to significant improvements in balance, strength, and overall mobility among older adults. Additionally, Kadowaki and Cohen (2017) highlighted the positive impact of community-based programs on physical health outcomes in their review of community-based seniors' services in British Columbia.

During the needs assessment phase, public health nurses provided expertise in selecting the questions that formed this section of the survey, ensuring the questions comprehensively addressed relevant aspects of physical health.

Social Well-Being

Six survey questions examined the social benefits of participation, including whether attendees met people with shared interests, felt welcomed at the centres, and experienced greater enjoyment through social connections. These questions were designed to assess whether community centres could help reduce feelings of loneliness and isolation, aligning with the Saanich Older Adult Strategy (District of Saanich, 2017).

The results provide insights into the potential impact of community centre activities on social inclusion and contribute to broader public health efforts to enhance quality of life for older adults in the community.

Accessibility

Five survey questions addressed barriers and facilitators to accessibility, focusing on ease of navigating the centres, visibility of signage, and the availability of staff assistance.

Accessibility was identified as a key priority by the working group, with input from public health nurses lending additional expertise.

These measures were further informed by the Saanich Older Adult Strategy (District of Saanich, 2017), which highlights the importance of improving accessibility for older adults and promoting inclusive community spaces.

By aligning the survey with the working group's priorities and established research frameworks, the study ensured that the collected data supports both immediate and long-term objectives for community centre programming and service improvements.

Results

The demographic profile of respondents provides insight into the population attending community centres in Greater Victoria. The survey was completed by 336 participants. Complete demographic information can be found in Table 1. The majority of participants identified as women (72.0%, n = 239), while men comprised 25.3% (n = 84), and 1.2% (n = 4) identified as a diverse gender identity. To maintain confidentiality, these participants were grouped into one category. In terms of age distribution, the largest groups of respondents were aged 71 to 80 years, with 23.5% (n = 89) aged 71–75, and 23.2% (n = 77) aged 76–80. The youngest age group, 50–55 years, represented only 5.4% (n = 18), while the oldest age groups—91–95 years

and 95+ years—had minimal representation (2.7%, n = 9 and 0%, respectively). Marital status varied among participants, with 58.7% (n = 195) indicating they were married or in common-law relationships, while 16.3% (n = 54) reported being widowed. Single individuals made up 8.4% (n = 28), and 15.4% (n = 31) were separated or divorced. Regarding employment status, most respondents (74.1%, n = 246) were fully retired, while smaller proportions were working (14.6%, n = 48) or semi-retired (7.8%, n = 26). The ethnicity of respondents was predominantly Caucasian (84.8%, n = 285), with other ethnicities making up 15.2% (n = 51). A notable portion of respondents provided caregiving support. Approximately 12.2% (n = 41) cared for a spouse or family member, while 18.8% (n = 63) provided care for grandchildren or younger family members. A small percentage (2.7%, n = 9) attended the community centre with younger family members. Transportation to the centres was most commonly by car (63.7%, n = 214), followed by handyDART (35.4%, n = 119). Walking was reported by 19% (n = 64), biking by 6% (n = 20), and transit use by 1.8% (n = 6).

Community centre membership and reasons for visiting showed that over half of respondents were LIFE, monthly, or annual passholders (54.5%, n = 183). Drop-in or non-registered class attendance accounted for 21.4% (n = 72) of visits. Healthcare provider referrals accounted for 3.7% (n = 9), while 8.6% (n = 29) attended to meet a group or individual, and 4.5% (n = 15) came as volunteers. A small percentage (0.6%, n = 2) attended as guests. Participation in registered programs also varied, with 62.1% (n = 136) enrolled in one program and 32.0% (n = 70) participating in two programs. A smaller number of respondents were involved in three or more programs (14.2%, n = 31 for three; 5.5%, n = 12 for four; and 4.6%, n = 10 for five or more). The length of visits to community centres varied significantly. The majority of participants reported spending one to two hours at the centre, with 36.2% (n = 121)

staying for about one hour and 50.6% (n = 169) staying for two hours. Short visits of 30 minutes were reported by 2.7% (n = 9), while longer visits of three to four hours were less common (5.1%, n = 17 for three hours; 2.1%, n = 7 for four or more hours).

Table 1: *Demographic and recreation centre visit information about participants.*

	N (%) unless stated otherwise
Gender	
Woman	239 (72.0)
Man	84 (25.3)
Other	4 (1.2)
Age	
50-55	18 (5.4)
56-60	19 (5.7)
61-65	32 (9.6)
65-70	43 (13.0)
71-75	89 (23.5)
76-80	77 (23.2)
81-85	28 (8.4)
86-90	15 (4.5)
91-95	9 (2.7)
95+	0
Marital Status	
Single	28 (8.4)
Separated/Divorced	31 (15.4)
Married/Common law	195 (58.7)
Widowed/Other	54 (16.3)
Employment	
Working	48 (14.6)
Semi-retired	26 (7.8)
Retired	246 (74.1)
Ethnicity	
Caucasian	285 (84.8)
Other	51 (15.2)
Transportation modes used to attend recreation centre (multiple responses possible)	
Walk	64 (19)
Bicycle	20 (6)

Transit	6 (1.8)
Car	214 (63.7)
handyDART	119 (35.4)
Membership/reason for visit	
LIFE/Annual/Monthly Passholder	183 (54.5)
Drop in/Non-registered classes	72 (21.4)
Healthcare provider referral	9 (3.7)
Guest	2 (0.6)
Volunteering	15 (4.5)
Meeting a group or individual	29 (8.6)
Number of programs registered in	
1	136 (62.1)
2	70 (32.0)
3	31 (14.2)
4	12 (5.5)
5+	10 (4.57)
Care for family	
Provides care for spouse or other adult family member	41 (12.2)
Provides care for grandchild or younger family member	63 (18.8)
Attends community centre with younger family member	9 (2.7)
Average length of visit	
0.5 hours	9 (2.7)
1 hour	121 (36.2)
2 hours	169 (50.6)
3 hours	17 (5.1)
4+ hours	7 (2.1)

The participant responses were aggregated into three key dimensions of wellbeing: Mental, Physical, and Social impacts of community centre attendance. The mean scores for each dimension are as follows: Mental Impact: 3.93 out of 5 (78.6%); Physical Impact: 4.21 out of 5 (84.2%); Social Impact: 4.03 out of 5 (80.6%). Table 2 (below) provides the mean scores, percentages, Cronbach's alpha values, and the number of items for each dimension, confirming

the reliability of these measures as indicators of well-being. These values are based on a 5-point Likert scale.

Table 2: *Combined Response totals for Mental, Physical, and Social Impacts Mean Scores and Cronbach Alpha values*

Dimensions of Health	Mean Score	Percentage	Cronbach's Alpha	Number of Questions
Mental Well-being	3.93	78.6%	0.798	5
Physical Health	4.21	84.2%	0.813	7
Social Well-being	4.03	80.6%	0.835	6

Cronbach's alpha was used to assess the internal consistency and reliability of the questions related to mental, physical, and social impacts. The alpha values confirm that these questions measure the same underlying concept, which in this case is the benefits of community centre participation. This indicates that the impacts can be treated as unified categories and serve as reliable measures of the benefits participants experience from community centre attendance.

For the Mental well-being scale, the Cronbach's alpha was 0.798, demonstrating good internal consistency across 5 questions. The Physical Health scale has a Cronbach's alpha of 0.813, reflecting very good internal consistency across 7 questions. Notably, question number 3, which queried if reliance on mobility devices was reduced because of recreation centre attendance. This question was excluded from this scale as it substantially decreased internal consistency. This may be because mobility device usage was not impacted, even if physical health was. The Social scale has a Cronbach's alpha of 0.835, indicating excellent internal consistency across 6 questions. All alpha values were based on a 5-point Likert scale. Overall, the combined measures have a Cronbach's alpha of 0.821, confirming these dimensions as reliable indicators of the benefits participants gain from community centre attendance.

As a general guideline, Cronbach's alpha values closer to 1 indicate higher reliability. All results fall within the good to excellent range: 0.7 (acceptable), 0.8 (good), and 0.9 (excellent), demonstrating findings that meet the alpha requirements (Field, 2018).

Qualitative Data

Qualitative data were collected to complement the quantitative data, providing a comprehensive understanding of community center attendees' behaviors and engagement. The inclusion of open-ended text boxes in the survey allowed participants to articulate their deeper motivations and personal experiences. This approach aimed to capture nuanced perspectives that predetermined responses could not convey. Additionally, the text boxes served as an inclusivity measure, allowing respondents to share their experiences in their own words, particularly regarding gender and ethnicity. This method enabled participants to express their identity as they define it, contributing to a more accurate and representative survey experience. The open-ended sections also provided space for respondents to offer insights on areas the survey may have overlooked, prompting them to reflect on relevant but unasked aspects of their experience. Many participants interpreted the final question, question 25, literally, sharing personal values and reflections such as "don't grow old alone" and "family is the most important thing," offering valuable insights into the cultural and social factors influencing their participation in community programs and future survey design. The qualitative data illuminated the broader context behind the trends observed in the quantitative results.

Qualitative Data Analysis

The survey responses were collected over the course of 15 in-person and Zoom meetings to ensure the survey captured the intended information. Follow-up interviews were conducted with participants who volunteered via a space provided on the final sheet of the 50+ Survey.

These interviews provided additional insights and context to the survey findings. Several participants agreed that the survey enabled them to relay their community centre experiences effectively. Here are four instances from those interactions:

Example #1:

- **Interviewer:** "So in terms of the survey and in terms of this discussion today, what do you think has been the best or most important question that you've been asked?"
- **Speaker 1:** "There was a question about if there are things that could be improved. I like the positive question of what do you like about the facilities because it's really easy to hone in on, and talk about. The survey is doing good work that the city needs to know about."

Example #2:

- **Interviewer:** "But between or across, these opportunities, do you feel as though, you've had an opportunity to genuinely relay your experiences? (Like if I took this and gave it to Oak Bay, would they have a good understanding or a good picture of your experiences?)"
- **Speaker 2:** "I yeah, I, I think they would have a good sort of idea."

Example #3:

- **Interviewer:** "So do you think that that it is an adequate relaying of your experiences in seeking?"
- **Speaker 3:** "Yeah, I would definitely say that it is. yes, yes, yes, I would."

Example #4:

- **Interviewer:** "Is this is a good way for individuals to relay their experiences?"
- **Speaker 4:** "Yeah, yeah, it is an accurate, reflection of our experience. Yeah. And after our discussion, they'll be able to see that. Yeah. This survey is doing it."

These quotes illustrate that participants found the survey to be a valuable tool for sharing their experiences and that the follow-up interviews provided further validation and depth to the survey data. The interviews ensured that the feedback was comprehensive, that the survey questions were consistently interpreted, and that the survey enabled a true relay of respondent perspectives.

Coding and Themes

The qualitative data analysis involved identifying recurring themes and patterns within the written responses. A manual approach was used to categorize responses into themes, including personal values, social engagement, and community center usage patterns. These themes provided context for the quantitative data, helping to explain why certain behaviors were prevalent among community center attendees, relating to the social ecological framework.

Findings

The primary themes that were identified in the qualitative data included personal values related to family, social connection, and a desire to stay engaged with the community. Many respondents highlighted the importance of family as a central aspect of their well-being and discussed how community centers play a role in maintaining social connections. Quotes from participants such as “family is the most important thing” and “don’t grow old alone” provided additional depth to the survey's findings, reflecting the personal significance of community programs.

Interpretation

These findings illustrate the importance of community centers not only as spaces for physical activity and social interaction but also as crucial sites for reinforcing personal values and family connections. The qualitative data illuminated the broader motivations for

participation that were not fully captured by the quantitative measures alone, thus contributing to a deeper understanding of how these centers influence the social and emotional well-being of older adults.

Discussion

This study sought to address two primary research questions. First, Research Question 1: How can a community-informed survey be co-developed in collaboration with community partners that effectively captures the experiences of older adults (aged 50+) who attend community centres in the Greater Victoria region? And second, Research Question 2: Once developed and piloted, how do the responses to this survey inform us about the social, mental, and physical benefits that older adults experience from attending local community centres? Through a collaborative, iterative approach rooted in CBPR principles, the survey was co-designed with input from recreation practitioners and senior advocates, successfully capturing the lived realities and priorities of the target population. The findings from the survey validated the strength of the survey, the relevance of this co-development approach, and offered actionable insights into the benefits community centres provide, particularly in fostering social well-being, enhancing mental health, and supporting physical activity.

The co-development of the 50+ Survey was a methodical and collaborative endeavor designed to ensure its relevance and accuracy in reflecting the lived experiences of older adults attending community centres in Greater Victoria, particularly in Oak Bay and Saanich. This participatory approach began with consultations involving key community partners, including senior management and staff from local community centres. These early discussions identified core themes central to the older adult population, such as caregiving, transportation, and

accessibility. For example, initial feedback highlighted the need for questions addressing mobility challenges, prompting adjustments to the survey's structure.

The survey's development was deeply rooted in CBPR principles, ensuring the process was both inclusive and reflective of community priorities. Community partners, including senior advocates and community centre staff, provided critical input throughout the iterative design process. This approach allowed the survey to be shaped by insights into issues such as financial accessibility and program inclusivity. A key challenge during this process was balancing the diverse priorities of partners while maintaining the survey's focus. Through consensus-building, these challenges were addressed, resulting in a tool that closely aligned with the needs of the community.

The construction phase of the survey involved extensive feedback from partners to assess its clarity, accessibility, and inclusiveness. For example, revisions were made to simplify language and ensure cultural sensitivity, enhancing the survey's usability for all respondents (National Collaborating Centre for Determinants of Health, 2013). This participatory and iterative process represents an innovative contribution to community-based research, as it ensured the survey was firmly grounded in lived experiences and directly informed by those it aimed to serve (Canadian Institute for Health Information, 2019). The successful completion and deployment of the 50+ Survey demonstrate the value of co-developing research tools with community input, offering a replicable model for other regions.

The responses to the survey provided a detailed understanding of the unique needs, experiences, and benefits perceived by older adults attending community centres in Oak Bay and Saanich. Unlike broader studies that generalize findings across diverse populations, this study highlighted specific challenges and priorities of this demographic. For instance, transportation

challenges and caregiving responsibilities emerged as significant barriers to participation, underscoring the importance of targeted interventions such as expanded transportation services or caregiver support programs. Research from the Canadian Longitudinal Study on Aging highlights that transportation problems are one of the most common barriers preventing older Canadians from participating in social, recreational, or group activities (Winters & Hosford, 2022). Additionally, the Canadian Centre for Caregiving Excellence emphasizes the significant toll caregiving responsibilities can take on caregivers, highlighting the need for support programs to alleviate these burdens (Canadian Centre for Caregiving Excellence, 2024)².

Financial constraints were also identified, with participants highlighting the cost of classes as a limitation to their engagement. Programs such as the LIFE subsidy card were recognized as vital tools in enhancing accessibility and inclusivity, enabling economically vulnerable populations to access community centre programs and services. This insight suggests that expanding financial assistance initiatives could significantly improve participation rates among lower-income older adults (Capital Regional District, 2022; Saanich Older Adult Strategy, 2017).

The survey responses further revealed the multifaceted benefits of community centre participation. Older adults frequently reported improvements in physical health, including increased strength and mobility, alongside enhanced social connections that reduced feelings of loneliness. These findings illustrate the interplay between social, mental, and physical health benefits, positioning community centres as holistic providers of well-being. Unlike interventions that focus solely on one dimension, community centres address multiple aspects of health, fostering a comprehensive approach to aging. Additionally, the responses highlighted disparities in program engagement among certain demographic groups. For example, men and ethnic

minorities were underrepresented among survey respondents, indicating a need for tailored outreach and programming to better serve these populations. These findings advocate for sustained investment in community centres as integral components of healthy aging strategies. They also underscore the need for targeted solutions to identified barriers, such as diversifying programming to meet a broader range of interests and abilities.

The survey responses provided actionable insights into the social, mental, and physical benefits that older adults derive from attending community centres. The survey results indicate that adults perceive community centre attendance as highly beneficial to their overall health. Participants reported improvements in both physical and mental well-being, attributing these positive changes to the structured recreational programs offered at the centres. Many respondents highlighted the importance of social interactions, and the sense of community fostered through these programs, which they believe contribute significantly to their mental health. These findings align with the research by Ronzi et al. (2018), which emphasizes the positive impact of social inclusion and respect on the health of older adults.

Furthermore, the survey revealed that participants who regularly engaged in physical activities at community centres experienced notable enhancements in physical functioning and improvements or changes in balance. This aligns with the findings of Pinheiro et al. (2022), which demonstrated the effectiveness of physical activity programs in improving physical and cognitive health among older adults. The survey results underscore the importance of integrating structured recreational activities into community centres to promote healthy aging and enhance the quality of life for older adults. By expanding these programs and ensuring accessibility for all, policymakers can create supportive environments that foster well-being and social cohesion.

Respondents consistently highlighted improved social connections and reduced feelings of isolation as primary benefits, demonstrating how community centre participation fosters a sense of belonging and strengthens interpersonal relationships. This aligns with existent literature on older adults. For instance, a study by the National Council on Aging (2019) found that older adults who participate in senior center programs experience higher levels of social interaction and greater life satisfaction compared to non-participants.

In addition, participants reported enhanced mental health through opportunities for lifelong learning, creative expression, and recreational programs that alleviate stress. Research indicates that cognitive stimulation through activities such as arts and crafts, educational workshops, and group discussions significantly improves emotional well-being and reduces depression rates among older adults (National Collaborating Centre for Determinants of Health, 2013). These findings highlight the multidimensional impact of community centre programs on older adults' well-being, making them indispensable resources for healthy aging (Canadian Institute for Health Information, 2019).

Challenges Encountered

While the collaborative process strengthened the survey's validity, there were minor challenges. One issue was balancing community preferences with the need for standardized, measurable constructs. For instance, some working group members advocated for more open-ended questions to better capture nuanced experiences, but these were ultimately limited to ensure the feasibility of data analysis. Additionally, logistical constraints, such as scheduling conflicts and varying levels of engagement among participants, occasionally delayed progress. The resulting survey demonstrated high face validity, as evidenced by positive feedback from pilot participants who found the questions clear and relevant (Belone et al., 2014). Moreover, the

collaborative approach fostered a sense of ownership among community members, enhancing their commitment to the study's broader goals. The process also provided valuable insights into the priorities and lived experiences of older adults, which extended beyond the scope of the survey itself. Overall, the CBPR-driven approach to survey development underscored the importance of community input in creating tools that are not only scientifically robust but also deeply resonant with the populations they aim to serve. This collaborative effort highlights the potential of CBPR to bridge gaps between academic research and real-world application, ultimately contributing to more effective and impactful community programs (Belone et al., 2014).

Future Research and Program Design

Future research and program design could expand CBPR applications by establishing community advisory boards to guide programming priorities, conducting participatory evaluations to assess the effectiveness of existing programs, or incorporating diverse cultural perspectives into program content through focus groups or co-design workshops. Integrating CBPR into these initiatives empowers community centres and their partners to create systems that are more equitable and resilient in meeting the evolving needs of older adults (Newman et al., 2011, 2024). Moving forward, if CBPR becomes a standard approach in community-based research to address health disparities, it would provide a mechanism for capturing nuanced data while empowering communities to shape solutions intended to benefit them. Future studies could explore longitudinal assessments of program impact to ensure sustained benefits and intersectional analyses examining how race, gender, and socioeconomic status influence program accessibility and effectiveness. The utilization of participatory frameworks allows for the creation of more inclusive and adaptive systems to meet the needs of older adults (Duke, 2020).

There are some barriers to participation that remain, with financial constraints cited as a significant challenge. Programs like the LIFE subsidy could be expanded to more greatly address this issue and increase accessibility for economically vulnerable groups. Transportation challenges were also highlighted, with many respondents relying on cars and expressing a need for improved senior-friendly transit options or partnerships with HandyDART.

The findings suggest a strong demand for diverse and sequenced programming, as well as flexible options that accommodate various schedules and preferences. A major piece of this puzzle is understanding what the populace wants and what their health needs are so that community centres can better serve their communities. Improved communication is crucial in this context. Effective communication strategies can help bridge the gap between community centres and their members, ensuring that programs are tailored to meet the actual needs and preferences of the community. For example, regular surveys and feedback mechanisms can provide valuable insights into the interests and requirements of older adults (Kelfve et al., 2020). Additionally, leveraging multiple communication channels, such as email newsletters, social media, and community notice boards, or opportunities for two-way communication, where community members can voice their opinions and suggestions, can enhance engagement, participation, and ensure that information about available programs and services reaches a wider audience (Government of Canada, 2024). By focusing on these communication strategies, community centres can better understand and meet the needs of their members, ultimately enhancing the overall impact of their programs on older adults' well-being (Casella, 2024).

Growing and building trust and transparency through open and honest communication is also essential. This can be achieved by keeping community members informed about decisions, changes, and new initiatives, encouraging a sense of inclusion and ownership. The sense of

inclusion is a critical component of community centre attendance. In 2016, Gallant and Hutchinson identified several factors that contribute to or undermine citizen empowerment in senior centres. Their study found that opportunities for meaningful engagement, sociability, and having a contributing role were positive factors that supported aging in place. However, restrictive hours and limited opportunities for leadership or control were seen as barriers to empowerment. This aligns with the broader findings of the scoping review, from which this study was sourced, which underscores the importance of creating environments that support social connections and active participation. The scoping review reiterates that a sense of belonging is critical to participation (Kadowaki & Mahmood, 2018). By addressing these barriers and enhancing the positive factors, community centres can better foster a sense of inclusion and empowerment among their members.

Demographic-specific insights from the survey reveal additional opportunities for targeted interventions. For instance, while women represented the majority of respondents, consistent with broader trends in aging demographics, programming could focus on addressing both gender-specific needs and potential barriers preventing men's participation. Many participants also reported caregiving responsibilities for spouses or younger family members. Community centres could support these dual roles by offering targeted programs such as respite care services or caregiving workshops. Furthermore, the preference for flexible, short-duration programs underscores the need to tailor offerings to meet older adults' scheduling needs while encouraging deeper engagement through sequential and integrated activities.

The study's findings emphasize the potential of community centres to advance health equity and inclusion. By supporting social integration and reducing disparities, these centres can address systemic barriers that older adults face in accessing traditional health resources.

Evidence from this research reinforces the value of prioritizing community centres in aging strategies, particularly as cost-effective public health interventions (Government of Canada, 2024; Canadian Centre for Activity and Aging, 2024). Localized insights from this study provide actionable recommendations for addressing regional gaps in areas like Oak Bay and Saanich, such as improving transportation and expanding caregiving resources. Additionally, this participatory approach offers a replicable model for other communities seeking to enhance their aging strategies through CBPR.

Future research could build on these findings by conducting longitudinal assessments of the sustained impact of community centre participation on health outcomes. Intersectional analyses examining how race, gender, and socioeconomic status influence program accessibility and effectiveness would further inform inclusive strategies. By adopting participatory frameworks, researchers and practitioners can continue creating adaptive systems to meet the evolving needs of older adults while fostering trust and collaboration within their communities.

Community centres serve diverse purposes and have varying impacts depending on their size and the services they offer. Some centres are localized and provide essential services such as meals, transportation to appointments, and social support, which are crucial for older adults who may face mobility or financial challenges. These centres act as lifelines for their communities, offering personalized support and fostering a strong sense of belonging. For example, in Oak Bay, the Oak Bay Recreation Centre offers a pool, skating rink, and running track, catering to a wide range of recreational needs. In contrast, the Monterey Recreation Centre, which is attached to a library, focuses on specialized services and is considered a senior's centre. Similarly, in Saanich, Saanich Commonwealth Place, a facility built for the Commonwealth Games, is

adjacent to a large district library and hosts various competitions, addressing the diverse needs of the community.

The existence of both localized centres and larger supercentres highlights the importance of a varied approach to community service provision. Localized centres provide targeted support and foster close-knit community ties, while supercentres offer extensive facilities and programs that attract a broader audience. This dual approach ensures that the diverse needs of older adults are met, promoting inclusivity and engagement across different community segments (Government of Canada, 2024; Canadian Centre for Activity and Aging, 2024).

Future research should explore the long-term impact of community centre participation on health outcomes and evaluate the effectiveness of targeted interventions, such as transportation assistance and financial subsidies. These efforts will ensure programming continues to address the diverse needs of older adults, fostering more inclusive and resilient communities. Building on the findings from this study, future research could explore the role of personal values in shaping community center engagement, as well as how different demographic factors (such as gender and ethnicity) influence participants' experiences. Further exploration of these themes could provide a more nuanced understanding of the factors that drive community engagement among older adults.

Frameworks and Lessons from Social Service Provision

Understanding the varied roles of community centres can be further enriched by examining relevant frameworks and lessons from social service provision. The Connected Community Approach (CCA) emphasizes the importance of social connections and networks in community development. By focusing on strengthening these connections, community centres

can act as catalysts for social and economic improvement (Connected Community Approach, 2024; Social Policy Frameworks in Canada, 2011).

This framework supports the idea that both small and large centres play crucial roles in fostering community cohesion and resilience (Gloger et al., 2018). The development of community centres can also be tied to the broader evolution of community care and social services. As communities grow and develop, there is a shift towards more comprehensive and integrated service provision, reflecting a commitment to addressing the diverse needs of the population. This evolution is evident in the transition from smaller, localized centres to larger, more comprehensive facilities, which can offer a wider range of services and programs (Gloger, 2024).

Social policy frameworks, such as those developed in various Canadian jurisdictions, provide a structured approach to planning and delivering social services. These frameworks emphasize the importance of community engagement, inclusivity, and responsiveness to local needs. By aligning with these principles, community centres can ensure that their programs and services are relevant and accessible to all members of the community. Larger community centres, often referred to as supercentres, offer a wide range of specialized services, including swimming pools, libraries, and facilities for creative activities like pottery making. These centres cater to a broader audience and provide opportunities for physical fitness, lifelong learning, and cultural engagement. The variety of programs available at these centres can attract diverse groups of older adults, promoting inclusivity and social interaction.

The social aspect of community centres cannot be overstated. They provide a space for older adults to connect with peers, participate in group activities, and build meaningful relationships. This social engagement is vital for mental health, reducing feelings of loneliness

and isolation. Community centres also offer educational and skill-building opportunities, empowering older adults to continue learning and stay active.

By integrating CBPR principles into program development and evaluation, community centres can ensure that their efforts are relevant and equitable. Establishing community advisory boards, conducting participatory evaluations, and incorporating diverse cultural perspectives into program content can enhance the effectiveness of these initiatives. This approach empowers community centres and their partners to create systems that are more equitable and resilient in meeting the evolving needs of older adults. With this foundational understanding of how CBPR principles can guide equitable program development, the following section will explore how the results of the co-developed survey directly address the research questions, focusing on the process and outcomes of capturing the experiences of older adults attending community centres in the Greater Victoria region.

The Role and Impact of Community Centres

Community centres serve as indispensable resources for older adults, offering a range of services and programs that address diverse needs. Smaller, localized centres often provide essential services such as meals, transportation assistance, and social support, fostering close-knit community ties. In contrast, larger supercentres offer extensive facilities and specialized programs, including swimming pools, libraries, and creative activities like pottery making, catering to a broader demographic and promoting inclusivity. This dual approach—balancing localized services with broader offerings—ensures the diverse needs of older adults are met.

The social dimension of community centre participation is especially significant. These centres provide safe spaces for older adults to connect with peers, participate in group activities, and build meaningful relationships. For example, respondents frequently cited the social

connections formed during group fitness classes or volunteer activities as critical to their mental health. Such engagement reduces loneliness and promotes a sense of belonging, which are key determinants of mental well-being. Additionally, community centres offer educational and skill-building opportunities that empower older adults to remain active and engaged. Incorporating CBPR principles into program development and evaluation further enhances the relevance and equity of community centre initiatives. Strategies such as establishing community advisory boards, conducting participatory evaluations, and integrating diverse cultural perspectives ensure programming remains inclusive and adaptable to the evolving needs of older adults. For instance, expanding multicultural programming or offering language-specific classes could address gaps in service for underrepresented populations.

This study comprehensively addressed the research questions, demonstrating that community centres are fulfilling a critical role in supporting the well-being of older adults. The co-developed 50+ Survey effectively captured the needs and experiences of this demographic, providing actionable insights that can inform future programming and policy decisions. The integration of CBPR principles into the survey's development and subsequent program evaluation underscores the importance of participatory research in creating equitable and effective community services. The findings contribute to the growing body of evidence advocating for the inclusion of structured recreational programs in broader aging strategies and provide a practical foundation for enhancing community programming.

Strengths and Limitations

In conducting this research, several methodological limitations emerged that may have influenced the findings. Over 400 surveys were distributed across the Oak Bay and Saanich community centers, the response rate was 336 completed surveys, along with 15 interviews,

resulting in a response rate of approximately 84%, which is commendable. Data collection occurred during the summer and into early fall, which may have affected the reach and inclusion of older adults who may be seasonal visitors or travel during these months. Though attempts were made to capture a wide range of responses, the non-response rate—albeit low—could indicate gaps in participation from specific groups, such as lower-income, immigrant, or Indigenous older adults.

Conclusion

The findings from this study affirm the indispensable role of community centres in fostering the social, mental, and physical well-being of older adults. By employing a co-developed survey rooted in participatory research principles, this study not only captured a comprehensive view of the benefits of community centre participation but also underscored the value of inclusive methodologies in community health research. These findings contribute to the growing body of evidence advocating for the integration of structured recreational programs into broader aging strategies, particularly as societies navigate the challenges of an aging population (Federal/Provincial/Territorial Ministers Responsible for Seniors Forum, 2019a; The Centre for Studies in Aging & Health, 2024; Federal/Provincial/Territorial Ministers Responsible for Seniors Forum, 2019b; Kadowaki & Cohen, 2017). Suggestions stemming from this study include hosting open houses to raise awareness of available programs and conducting longitudinal studies to measure the sustained impact of community engagement on health outcomes. Future research could also explore the role of community centres in fostering intergenerational connections, supporting diverse cultural communities, and addressing barriers faced by underrepresented groups. In light of these findings, it is clear that community centres must continue to adapt and innovate to meet the evolving needs of older adults. With sustained

investment and collaborative efforts, they can remain integral to healthy aging strategies and serve as vital pillars of inclusive, resilient communities.

Ultimately, community centres play a multifaceted role in promoting the well-being of older adults. They provide essential services, foster social connections, and offer opportunities for physical and mental health improvement. By addressing barriers to participation and incorporating community input, these centres can continue to be indispensable resources for healthy aging.

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Appendices

Appendix A Preliminary Questions for the Working Group

Working Group Questions

1. Which pieces of information are you interested in capturing about the survey participant?
 - a) About identifying survey participants as registered, or non-registered users: do you wish to know which activity they were attending (aqua class, club meeting, weight room, art class, etc.)?
 - b) If the participant is a registered user, do you wish to know their reason for registration?
 - c) If the participant is not a registered user, what would be useful to capture?

2. Is gauging the survey participant's engagement with the *facility of interest?
 - a) Would a question about use before and after, or outside of class attendance be useful?
 - b) What would you like to ask?

3. What questions would you like to ask about the survey participant's experiences with the physical, social, and, or mental health impacts of recreation involvement?

Some examples of the types of question that might be asked:

- Physical impact Do you feel stronger?
Do you feel more fit?
Has class participation contributed to your being more active?

- Social Elements Have you made friends?
Are you in a club?
Do you volunteer?

- Mental
Do you feel more mentally alert?

Is your mood consistent?

Would you rate your motivation as consistent?

4. Are you looking for any "post-COVID" social information?

A question could request info about meeting friends, returning to utilizing social spaces and volunteering

5. Are there questions you would like to ask about survey participant satisfaction? What would you add to the below example?

Example: Did this capture your recreation experience?

Was there a viewpoint you have that was not captured by the survey questions?

-Yes? Please share your thoughts.

6. Your thoughts...

Appendix B Ethics Certificate



**University
of Victoria**

Office of Research Services | Human Research Ethics Board
 Michael Williams Building Rm B202 PO Box 1700 STN CSC Victoria BC V8W 2Y2 Canada
 T 250-472-4545 | F 250-721-8960 | uvic.ca/research | ethics@uvic.ca

Certificate of Approval - Annual Renewal

PRINCIPAL INVESTIGATOR:	Jean Buckler (Supervisor)	ETHICS PROTOCOL NUMBER	22-0384
		Expedited review - delegated	
PRINCIPAL APPLICANT:	Celia Payne Master's student	ORIGINAL APPROVAL DATE:	27-Apr-2023
UVIC DEPARTMENT:	Exercise Science, Physical and Health Education EPHE	APPROVED ON:	20-Mar-2024
		APPROVAL EXPIRY DATE:	26-Apr-2025

PROJECT TITLE: Evaluating the mental, social, and physical benefits of recreation programming for older adults

RESEARCH TEAM MEMBERS:

Sandra Pearson - Community Organization representative, District of Oak Bay, Director
 Lisa Banks - Community Organization representative, Municipality of Saanich, Parks and Recreation Department
 Steve Meikle - Community Organization representative, District of Oak Bay, Director

DECLARED PROJECT FUNDING:

Mathematics of Information Technology and Complex Systems (MITACS), University of Victoria

DOCUMENTS INCLUDED IN THIS APPROVAL:

tcps2-eptc2-certificate.pdf - 27-Oct-2022
 V1 March 20 2023 - District Municipality Recruitment Agreement - Oak Bay.ipeq - 23-Mar-2023
 V1 March 20 2023 - District Municipality Recruitment Agreement - Saanich.pdf - 05-Apr-2023
 Interview Questions Version 1.pdf - 25-Apr-2023
 Survey - Version 3.pdf - 30-May-2023
 Recruitment Agreement Fairfield.pdf - 19-Jul-2023
 Recruitment Agreement from SEAPARC.pdf - 19-Jul-2023
 Recruitment Announcement - July 25 - Version 2.pdf - 27-Jul-2023
 Interview Consent Form July 25 - Version 3.pdf - 27-Jul-2023
 Participant Survey Consent Implied July 25 - Version 3.pdf - 27-Jul-2023

Conditions of approval

This Certificate of Approval is valid for the above term provided there is no change in the protocol.

Amendments

To make changes to the approved research procedure in your study, please submit "Amendments" or "Annual renewal with amendments" form. You must receive research ethics approval before proceeding with your amended protocol.

Renewals

Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an emailed reminder prompting you to renew your protocol about six weeks before your expiry date.

Project Closures

When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.

Certification

This certifies that the UVic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropriate standards of ethics as outlined by the University of Victoria's policies for research involving human participants.



Dr. Sandra Gibbons
Chair, Human Research Ethics Board



Dr. Matthew Murphy
Vice-chair, Human Research Ethics Board

Certificate Issued On: 20-Mar-2024

Permission Request

Date: December 2022

Study Name: Evaluating the mental, social, and physical benefits of recreation programming for older adults

Researchers: Dr. Jean Buckler, University of Victoria, ejean@uvic.ca; Celia Payne, University of Victoria; celiapayne@uvic.ca

Purpose of the Research: Develop a survey tool that can be utilized by municipalities to assess the effectiveness of recreation programs at improving the social, mental, and physical health of older adults.

Participation Recruitment: Permission is requested for survey distribution; the posting of survey announcements; recruitment of participants; and survey data collection at Saanich and Oak Bay Community centres.

By the authority of,

Role

Signature

Date

Municipality



Evaluating the benefits of recreation programming for older adults

You are invited to participate in a study entitled Evaluating the benefits of recreation programming for older adults that is being conducted by Celia Payne and Dr. Jean Buckler.

Celia Payne is a graduate student in the School of Exercise Science, Physical and Health Education at the

University of Victoria. Dr. Jean Buckler is an Assistant Professor in the School of Exercise Science, Physical and Health Education at the University of Victoria. The telephone number is, (250) 721-8387 or email: celiapayne@uvic.ca, or ejean@uvic.ca.

The Mathematics of Information Technology and Complex Systems, or Mitacs, is funding this research.

Purpose and Objectives

The objective is to use a survey to examine the effectiveness of community and recreation programs for persons 50 years of age and greater.

Importance of this Research

Persons 50 years of age and greater are quickly becoming the largest population demographic on Vancouver Island, and the largest community-centre-user demographic. Feedback about engagement with community centres positions municipalities to provide classes and services that impact health and service communities.

Participant Selection

You are being asked to participate in this study because you are 50 years of age, or more, and you are interested in sharing your community centre experiences. Opportunities for involvement in an interview are available to those interested in additional participation, after the completion of the survey. This consent form outlines both the survey and interview, but you will provide consent for each of these separately.

What is involved

Survey

If you consent to voluntarily participate in this research, your participation will include completing a survey. Paper copies of the survey are available in community centres and an online version is accessible by URL or QR code. The questions in the survey are related to community centre experiences.

Interview

To obtain a deeper understanding of community centre experiences, volunteers are being sought for an interview. Persons interested in participating in the interview will be asked to provide their contact detail on a separate page, at the end of the survey. Participation in the interview will require meeting for a discussion about different aspects of community centre engagement.

Recordings and hand-written notes from the interviews will be auto transcribed via Zoom recordings, and then checked for accuracy and transcribed into Word documents and separated from personal identifiers. Contact information for participants is stored in a separate file from research data in the event that obtaining any further detail is essential.

Please be advised that the information being gathered is for this research study only, which could include your name, uses an online program located in the U.S. or a program that can be accessed from the US (SurveyMonkey). As such, there is a possibility that information about you may be accessed without your knowledge or consent by the US government in compliance with the US Freedom Act.

Participants will be advised if they have or may have come into contact with an individual who has tested positive for COVID-19.

Inconvenience

In an effort to mitigate inconvenience the survey is being made available in a paper format and can be completed and returned at the participant's leisure. Ideally, survey responses will be returned within a two-week period.

Family members can assist with the completion of the form.

Risks

Participants are advised that there is a potential emotional risk involved with participation in this survey. The survey asks about the mental, physical, and social impacts associated with engagement at a community centre. If you have had a negative experience in a physical activity environment or with a service, this may bring up upsetting feelings for you. To prevent, or to deal with these risks the following options are available: completing the survey at your leisure, at your own pace, managing feelings and thoughts as they arise, and, or requesting assistance from a family member or assistant.

Benefits

Your responses are important. In addition to engagement, your feedback positions community centres to improve programs and community services.

Voluntary Participation

Your participation in this research must be completely voluntary. If you decide to withdraw from the study and have submitted your survey it will be logistically impossible to remove your survey as they are anonymously submitted. Quotes from the survey and the interview may also be used in presentations.

On-going Consent

To make sure that you continue to consent to participate in this research, a research team member will ask you verbally if you wish to continue to participate at the beginning of your interview.

Anonymity

In terms of protecting your anonymity your name and any identifying details will be removed from any place we publish or share the data. Persons who consent to participation in the interview will be asked to provide an email address or a phone number for contact. Once the responses have been transcribed, they will be anonymized.

Confidentiality

Your confidentiality and the confidentiality of the data will be protected by storing all data on secure UVic servers. Only researchers who are working on the project will be able to access the data from the project. Audio/video recordings will be saved until they are transcribed into word documents and then they will be destroyed using SDelete Secure File Deletion Tool. Data will be saved for 7 years from the completion of the project, and then destroyed using the UVic recommended tool at the time.

Dissemination of Results

It is anticipated that the summary results of this study will be shared with others in the following ways: first we will directly share the results with the Municipalities of Oak Bay and Saanich. Results will also be shared with the funder, Mitacs, a thesis will be developed, and the results will be published in an academic journal and shared at a research conference.

This survey is one part of a series of mandates outlined in the Saanich Older Adult Strategy. The findings will be utilized to strengthen community partnerships and the growing body of research on community centres.

Disposal of Data

Data from this study will be disposed of after seven years. Electronic data will be erased, and paper copies will be shredded. Before this time, electronic data will be stored on UVic secured servers and paper data will be stored in a locked filing cabinet, in a locked office at the University of Victoria campus. Dr. Buckler may use the survey data for future studies and endeavours prior to the seven years.

Contacts

Individuals that may be contacted regarding this study include Dr. Jean Buckler (250-721-8387 or ejean@uvic.ca).

In addition, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

By completing and submitting the questionnaire, **YOUR FREE AND INFORMED CONSENT IS IMPLIED** and indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

Please retain a copy of this letter for your reference.



Evaluating the benefits of recreation programming for older adults

You are invited to participate in a study entitled “Evaluating the benefits of recreation programming for older adults” that is being conducted by Celia Payne and Dr. Jean Buckler.

Celia Payne is a graduate student in the School of Exercise Science, Physical and Health Education at the University of Victoria. Dr. Jean Buckler is an Assistant Professor in the School of Exercise Science, Physical and Health Education at the University of Victoria. The telephone number is, (250) 721-8387 or email: celiapayne@uvic.ca, or ejean@uvic.ca.

The Mathematics of Information Technology and Complex Systems, or Mitacs, is funding this research.

Purpose and Objectives

The objective is to use a survey to examine the effectiveness of community and recreation programs for persons 50 years of age and greater.

Importance of this Research

Persons 50 years of age and greater are quickly becoming the largest population demographic on Vancouver Island, and the largest community-centre-user demographic. Feedback about engagement with community centres positions municipalities to provide classes and services that impact health and service communities.

Participant Selection

You are being asked to participate in this study because you are 50 years of age, or more, and you are interested in sharing your community centre experiences. Opportunities for involvement in an interview are available to those interested in additional participation, after the completion of the survey. This consent form outlines both the survey and interview, but you will provide consent for each of these separately.

What is involved

Interview

If you consent to voluntarily participate in this interview, your participation will consist of being asked to supply answers based on your experiences in community centres. Please be advised that the information being gathered is for this research study only, which could include your name, uses an online program located in the U.S. or a program that can be accessed from the US (ZoomUS). As such, there is a possibility that information about you may be accessed without your knowledge or consent by the US government in compliance with the US Freedom Act.

Recordings and hand-written notes will be transcribed into Word documents and then separated from personal identifiers. Contact information for participants is stored in a separate file from research data in the event that obtaining any further detail is essential.

Please be advised that the information being gathered is for this research study only.

Participants will be advised if they have or may have come into contact with an individual who has tested positive for COVID-19.

Inconvenience

We recognize the importance of your time, participation in this study will take up your time, which could be up to an hour for the interview, plus your travel time to and from UVic.

Risks

Participants are advised that there is a potential emotional risk involved with participation in this interview. The survey asks about the mental, physical, and social impacts associated with engagement at a community centre.

If you have had a negative experience in a physical activity environment or with a service, this may bring up upsetting feelings for you. To prevent, or to deal with these risks the following options are available: providing answers as you are ready, managing feelings and thoughts as they arise, and, or pausing or taking breaks as necessary.

Benefits

Your responses are important. In addition to engagement, your feedback positions community centres to improve programs and community services.

Compensation

Bus fare or parking fees can be provided for individuals to get to the University of Victoria to participate in the interview.

Voluntary Participation

Your participation in this research must be completely voluntary.

If you do decide to participate, you may withdraw at any time without any consequences or any explanation.

If you withdraw from the study and would like your interview data removed, please let us know right away. Please be aware that if we have already transcribed your responses, we will be unable to remove your data. Quotes may also be used in presentations of the data, without identifiers.

Anonymity

In terms of protecting your anonymity your name and any identifying details will be removed from any place we publish or share the data. Once the responses have been transcribed, they will be anonymized.

Contact information for participants is stored in a separate file from research data in the event that obtaining any further detail is essential.

Confidentiality

Your confidentiality and the confidentiality of the data will be protected by storing all data on secure UVic servers. Only researchers who are working on the project will be able to access the data from the project. Audio recordings will be saved until they are transcribed into word documents and then they will be destroyed using SDelete Secure File Deletion Tool. Data will be saved for 7 years from the completion of the project, and then destroyed using the UVic recommended tool at the time.

Dissemination of Results

It is anticipated that the summary results of this study will be shared with others in the following ways: first we will directly share the results with Municipalities of Greater Victoria. Results will also be shared with the funder, Mitacs, a thesis will be developed, and the results will be published in an academic journal and shared at a research conference.

This interview is one part of a series of mandates outlined in the Saanich Older Adult Strategy. The findings will be utilized to strengthen community partnerships and the growing body of research on community centres.

Disposal of Data

Data from this study will be disposed of after seven years. Electronic data will be erased, and paper copies will be shredded. Before this time, electronic data will be stored on UVic secured servers and paper data will be stored in a locked filing cabinet, in a locked office at the University of Victoria campus. Dr. Buckler may use the interview data for future studies and endeavours prior to the seven years.

Contacts

Individuals that may be contacted regarding this study include Dr. Jean Buckler (250-721-8387 or ejean@uvic.ca).

In addition, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

A copy of this consent will be left with you, and a copy will be taken by the researcher.



Signature Page for Interview Consent

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to participate in this research project.

Name of Participant

Signature

Date

50+ Survey

1. What is the name of the Community Centre you regularly attend ?

Getting to know you

2. Today, I am

- 50 – 55 56 – 60 61 – 65 66 – 70 71 – 75
 76 – 80 81 – 85 86 – 90 91 – 95 96+

I identify as

3. Gender: _____

4. Ethnicity: _____

5. Marital status

- Single / Never married Separated / Divorced
 Married / Residing as a family Widowed

6. Living arrangements

- House / Condo
 Assisted Living (Any form of daily or weekly assistance)
 Other: _____

7. Employment status

- I am working I am semi-retired I am retired

8. What brought you to the community centre today? (Check all that apply.)

- I am a LIFE, monthly, or annual passholder
- I am dropping in (non-registered classes)
- A health care provider has referred me
- Today, I am a guest
- I am volunteering
- I am meeting someone or a group
- I am attending a free or community event
- Other: _____

9. How did you first find out about your activity?

- Active Living Guide
- Active Living Guide (Online)
- Called front desk
- I walked-in
- Friend / Family
- Other: _____

10. How did you get to the centre today?

-  Walk
-  Bicycle
-  Transit
-  Car
-  handyDART

11. Caregivers

1. Do you help support or provide care for a family member?

No Yes Average number of hours per week

2. Do you help support or provide care for younger family members?

(Ex: grandchildren)

No Yes Average number of hours per week

3. Do you attend a community centre with a younger family member you care for?

No Yes Average number of hours per week

3b. Are there barriers you face in attending the community centre (drop in or classes) with a younger family member? Please provide more details:
(Ex. Activities are accessible. Chairs are available.)

Accessibility

12. Leaving home

Does anyone in your home have a health condition lasting for six months or longer, that makes it difficult to get around inside the house, and into and out of the house?

Myself Someone else No

13. At the community centre, is it easy to:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
1. Get here from home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Find parking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Find a secure spot to lock up your bike?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. How many days per week do you attend the community centre:

On weekdays?

0 1 2 3 4 5

15. On weekends?

0 1 2

16. Per visit, how much time do you spend at the community centre?

- 30 min 1 hour 2 hours 4 hours 4+ hours

17. What are the top activities that draw you to the community centre?

18. At the community centre:

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
-------------------	----------	----------------------------	-------	----------------	-----

1. Signs and directions in the community centre are easy to see and understand.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

2. Ramps and restrooms are easy to find and access.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

3. Signage, lighting, ramps, grab-bars, accessible shower, and washroom facilities, support movement throughout community centres.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

4. It is easy to approach community centre staff to obtain information or to obtain help:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

19. In class:

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
----------------------	----------	----------------------------------	-------	-------------------	-----

1. Classes are easy to understand and follow.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
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2. When I am in class, I can see, and I can hear.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

3. The instructor provides modifications, and class feels welcoming and inclusive.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

4. What would you like to share about accessing information?
(Ex. Are staff visible? Are staff approachable?)

Impacts

20. Mental impacts of attending community centre programs

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
1. I look forward to attending class(es) and participation helps keep me motivated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Participation helps me achieve my health goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Participation increases my confidence to try other activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Participation has led me to enrol in more than one class or activity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Participation helps lower my stress levels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. What would you like to share about class experiences?

22. Physical impacts of attending community centre programs

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
1. Participation improves my health.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Participation helps with my mobility.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Participation eases my use of mobility aids like a cane, walker, scooter, or chair.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Participation helps improve my balance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Participation helps me feel stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Participation has made me strong enough to try new or more challenging physical activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Participation helps to keep me active in my chosen activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Participation helps me sleep better.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Social Impacts of community centre programs

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
1. I have met people with similar interests and made friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Participation has exposed me to other classes and / or services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Participation inspires me to get more involved.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Participation supports my goals and interests.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I find enjoyment from connecting with others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I feel welcome at the community centre.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. How many registered programs are you in?

1 2 3 4 5 6 7+

25. Any additional thoughts?

Please tell us about what is important to you.

A large, empty rectangular box with a thin black border, intended for the respondent to provide their additional thoughts.

**Thank you for your time.
Your community centre feedback is valuable.**

Are you interested in participating in an interview
to further discuss your responses?

Interviews will be conducted in person at the University of Victoria.

Please provide your contact detail

Name
Email or Telephone

Or, contact: celiapayne@uvic.ca

Appendix G Chart - 50+ Survey Development Timeline

The methodological process of the survey development sorted by each phase and significant activities.

Stage 1: Needs Assessment				
Date	Event	Participants	Details	Location
2022 - 09 - 26	First (in-person) meeting	Lisa Banks (Saanich), Sandra Pearson (Oak Bay), Steve Meikle (Oak Bay), Jean Buckler (University of Victoria), Celia Payne (University of Victoria)	First in-person meeting; Sandra and Lisa shared vision for project and survey	Location: Oak Bay Recreation Centre
2022 - 10 - 12	Working Group Assembled	Working group	Preliminary needs assessment questions compiled and distributed	
2022 - 10 - 25	Working Group Meeting	Working Group	Chaired by Lisa Banks (Saanich), Jean Buckler (University of Victoria), and Celia Payne (University of Victoria)	Teams Meeting

Stage 2: Survey Drafting / Advisory Committee / Ethics Application				
2022 - 11 - 03	First Working Group Meeting	Working group	Request for Survey detail to complete 50+ survey	Teams Meeting
2022 - 11 - 21	Email to Working group	Working group	First version of the survey drafted and shared for feedback	
2022 - 12 - 09	Email	By Lisa Banks (Saanich)	Scheduling for community centre visits initiated	
2022 - 12 - 15	Ethics paperwork	By Jean Buckler (University of Victoria)	Data collection permission form finalized	
2022 - 12 - 15	Working Group Meeting - Zoom Meeting #2	Working group	Presentation of Survey draft, Obtained permissions for data collection – ahead of ethics	Teams Meeting

2023 - 02 - 01	Email to Advisory Member	Celia Payne (University of Victoria), Jean Buckler (University of Victoria), John Meldrum (University of Victoria)	Email check-in with Advisory member John Meldrum (University of Victoria)	
2023 - 03 - 16	Email to Working group	Working group	Final version of the 50+ survey ready	
2023 March – April	Ethics paperwork	Jean Buckler (University of Victoria), Celia Payne (University of Victoria)	Focus on completing Ethics paperwork	

Stage 3: Recruitment, Survey Distribution, and Data Collection				
2023 - 04 - 20	Site Visit	Celia Payne (University of Victoria), Lisa Banks (Saanich)	Community Centre (Volunteer) Orientation	Saanich Commonwealth Place
2023 - 04 - 25	Site Visit	Celia Payne (University of Victoria), , Deanna Roch (Saanich)	Community Centre (Volunteer) Orientation	Cedar Hill Recreation Centre
2023 - 05 - 04	Site Visit	Celia Payne (University of Victoria), Brett Speed (Oak Bay)	Community Centre (Volunteer) Orientation	Monterey Centre
2023 - 05 - 12	Email	Celia Payne (University of Victoria), Lisa Banks (Saanich), Deanna Roch (Saanich), Brett Speed (Oak Bay)	Recruitment Posters sent	To Cedar Hill Recreation Centre, Saanich Commonwealth Place, and Monterey Centre
2023 - 05 - 18	Advisory Meeting	Celia Payne (University of Victoria), John Meldrum (University of Victoria)	Presentation for: John Meldrum (University of Victoria)	University of Victoria

Stage 4: Data Collection Beyond Survey Responses

Thursdays in June (1, 8, 15, 22 & 29)	Data Collection	Celia Payne (University of Victoria), Brett Speed (Oak Bay)	Survey distribution in Community centre lobby	Monterey Centre
Fridays in June (2, 9, 16, 23 & 30)	Data Collection	Celia Payne (University of Victoria), Lisa Banks (Saanich)	Survey distribution in Community centre lobby	Saanich Commonwealth Place
Mondays in June (5, 12, 19 & 26)	Data Collection	Celia Payne (University of Victoria), Deanna Roch (Saanich)	Survey distribution in Community centre lobby	Cedar Hill Recreation Centre
Mondays in July (3, 10 & 17)	Data Collection	Celia Payne (University of Victoria), Brett Speed (Oak Bay)	July 24 & 31 no visit	Monterey Centre
2023 - 07 - 12	Data Collection	Celia Payne (University of Victoria), Lisa Banks (Saanich)	Survey distribution in Community centre lobby	Saanich Commonwealth Place

Thursdays in July (6, 13 & 20)	Data Collection	Celia Payne (University of Victoria), Deanna Roch (Saanich)	Survey distribution in Community centre lobby	Cedar Hill Recreation Centre
Fridays in July (7, 14 & 21)	Data Collection	Celia Payne (University of Victoria), Lisa Banks (Saanich)	Survey distribution in Community centre lobby	Saanich Commonwealth Place
2023 - 07 - 11	Site Visit	Celia Payne (University of Victoria), Kathleen Baker (Saanich)	Community Centre (Volunteer) Orientation	G.R. Pearkes Recreation Centre
2023 - 07 - 13	Site Visit	Celia Payne (University of Victoria), Elizabeth McCarter (Island Health)	Presentation and Data Collection	Yakimovich Wellness Centre

2023 - 07 - 18	Site Visit	Celia Payne (University of Victoria), Kathleen Baker (Saanich)	Survey distribution in Community centre lobby	G.R. Pearkes Recreation Centre
2023 - 07 - 19	Site Visit		Community Centre visit	Metchosin Seniors Association

2023 - 07 - 24	Site Visit	Celia Payne (University of Victoria), Anne Nelson (Silver Threads)	Community Centre Tour	Silver Threads Service - Les Passmore Centre
2023 - August 16, 17, and 21	Data Collection	Celia Payne (University of Victoria), Lisa Banks (SEAParc)	Survey distribution in Community centre lobby	SEAParc Leisure Complex
2023 - 08 - 21	Zoom Presentation	Celia Payne (University of Victoria), Lisa Banks (Yakimovich)	Presentation and Data Collection	Yakimovich Wellness Centre

2023 - August 23, and 28	Data Collection	Celia Payne (University of Victoria), Lisa Banks (Saanich)	Survey distribution in Community centre lobby	Saanich Commonwealth Place
2023 - 08 - 24	Site Visit		Community Centre Tour	Fairfield Gonzales Community Association
2023 -09 - 07	Survey retrieval	Celia Payne (University of Victoria), Lisa Banks (Saanich)		Saanich Commonwealth Place
2023 - 09 - 20	Survey retrieval			Fairfield Gonzales Community Association, Fairfield Gonzales, Silver Threads
2023 - 09 - 30	Site Visit		Community Centre Tour	Crystal Pool and Fitness Centre and Henderson Recreation Centre

2023 - 10 - 03	Site Visit		Community Centre Tour	St. James Community Square
2023 - 10 - 03	Site Visit		Community Centre Tour	Gordon Head Recreation Centre
2023 - October 11, 18, and 25	Data Collection	Rebecca Davidson (Gordon Head), Dan Atagi (Gordon Head), Celia Payne (University of Victoria)	Survey distribution in Community centre lobby	Gordon Head Recreation Centre
2023 - October 31, 2023; November 7, and November 14	Data Collection	Sandra Pearson (Oak Bay), Steve Meikle (Oak Bay), Celia Payne (University of Victoria)		Oak Bay Recreation Centre
2023 - 11 - 03	Survey retrieval			Silver Threads Service Victoria Centre
2023 - 11 - 03	Zoom Meeting	Working Group	Gather feedback on survey results and future reports	

Stage 5: Data Processing				
Date	Event	Details	Details	Location
April 2023 - Present			Data Processing	



**University
of Victoria**

Recruiting Participants

Survey Participants Wanted

Can you share some time to answer a survey about
your community centre experiences?



Participants must be:

- 50 years of age
or older

and

- In attendance at a
community centre
in Saanich or Oak
Bay

Take the survey:

- In person at community centres (paper copy)
- Online at
https://www.surveymonkey.ca/r/Survey_for_50plus
- On your phone (Click the QR code)



Study #22-0384, is approved by the University of Victoria Ethics Board.
To verify the ethical approval of this study, or raise any concerns, the Human Research Ethics Office at the University of
Victoria is available at (250) 472-4545 or ethics@uvic.ca.

Principal Researcher: Dr. Jean Buckler; Graduate Student: Celia Payne

School of Exercise Science, Physical and Health Education.

Telephone number (250) 721-8387 or email: celiapayne@uvic.ca, or ejean@uvic.ca.

Appendix I Interview Questions

Interview Questions

Thank you for your time today. Before we begin, I would just like to remind you that your participation in this interview is voluntary, and if you wish to stop at anytime please let me know.

1. What draws you to the centre? / Why do you come to the community centre?
 - a. (If answer to above is health and fitness related) What did you do to manage your fitness and health before regularly attending the community centre?

2. What has been the biggest impact in your life from attending the community centre?
Is what has been identified: mental, social, or physical?

What were the results?

How long did they take to achieve?

 In case this has not come out by this point in the conversation.

Have you experienced any unexpected or surprise benefit(s) from attending the community centre?
Have there been any drawbacks to attending the community centre?

3. What would make you attend the community centre more? / If you could change one thing, what would it be?
Is there anything that prevents you from attending the centre when you want to?

4. What has participation in your local community centre helped you connect to?
(Ex. A greater understanding about yourself? A connection to community? A place to find a friend, or a book at a library, or a beneficial class?)

5. When you have needed to access information - was it easy to find? Or find someone to help you? (Ex. Are staff visible? Are staff approachable? Is the centre doing something really well?) Do you ever try to find information online? What is that experience like?
Have you ever phoned the centre for information? What is that experience like?

6. Are there things about the community centre you would like to know more about?

7. What kinds of activities do you participate in at your community centre?
 - a. Are you enrolled in classes at the community centre?
 - b. Participate in drop in group activities?
 - c. Drop in to do an activity on your own? Or with friends/family?
 - d. Other than the class(es) in which you are enrolled, how familiar are you with the other types of classes and services the community centre offers?

8. *Please finish this phrase (with as many words, or sentences as necessary)

A community centre is more than a building, it is _____ ...

9. What kinds of events would you like to see more of at community centres?
10. Are there ways that your community centre to continue could support your interests and fitness level?
11. Is the community centre that you most frequently attend, the centre that is closest to your home? Why or why not?

Now we are going to ask a few questions specifically about the survey you completed. I have brought a blank copy for you to look at in case you need to refresh your memory.

12. Did the survey enable you to express your experience(s)?
Which components of community centre experiences have we not explored – or not explored enough?
13. What was the best question that you have been asked?
14. Were there questions missing that we could have asked instead?
15. Is there an aspect of your community centre experience that we have not discussed?
Between completing the 50+ Survey, and participating in this discussion, do you feel as though you have been able to relay your community centre experience(s)?
16. Is there anything else you would like to say about the community centre?

Thank you for your responses.

Thank you for sharing.

Version 2: April 24, 2023 2 of 2

Interview Invitation

This is a template, with instructions

Subject: Follow-Up Interview Opportunity: Share Your Community Centre Experience

Dear [Participant's Name],

I hope this email finds you well. I am writing to you as a participant who completed the 50+ Survey. The survey was either completed online, or a paper copy of the survey was obtained at a Vancouver Island community centre. Your feedback has been invaluable, and your participation in the survey is sincerely appreciated.

As part of our ongoing efforts to understand community centre experiences for individuals aged 50 and above, we are conducting follow-up interviews to delve deeper into your experiences and gather additional insights. Your perspective will help us ensure that the survey accurately captured your experiences while helping to identify any areas for improvement.

The follow-up interview will provide you with an opportunity to share more about your experiences in community centres, offer feedback on the survey, and provide any additional insights you believe would be beneficial. The interview typically lasts between 30 minutes to one hour, depending on your availability and willingness to share.

To accommodate your schedule and preferences, we have set up a convenient appointment scheduling system. Please click on the following link to select a time slot that works best for you: [Insert Link to Appointment Scheduler]. If you encounter any difficulties or need assistance with scheduling, feel free to reply to this email, and I'll be more than happy to assist you.

For your convenience, the interview will take place in the McKinnon building at the University of Victoria. If mobility is an issue for you, please let us know, and we will make arrangements to ensure accessibility.

Attached to this email, you will find a list of questions that will guide our discussion during the interview. This will provide you with an opportunity to review and prepare your thoughts beforehand.

Your participation in this follow-up interview is greatly appreciated, and your insights will contribute significantly to our efforts to enhance the community centre experience for everyone.

Thank you once again for your valuable contribution. We look forward to hearing from you and scheduling a time for our discussion.

Warm regards,

[Your Name] [Your Position/Title] [Your Contact Information]

Appendix J: Acronyms and Terms - Alphabetized

Acronyms:

Canada

1. AFC – Age-Friendly Communities
2. CIHR – Canadian Institutes of Health Research
3. CLSA – Canadian Longitudinal Study on Aging
4. ESDC – Employment and Social Development Canada
5. HARP – Health and Recreation Partnership
6. LIFE – Financial Assistance Program for Community Center Activities (Vancouver Island, B.C.)
7. NSP – National Seniors Strategy
8. PHAC – Public Health Agency of Canada
9. UBC – University of British Columbia
10. UVic – University of Victoria

U.S.A.

1. AHA – American Heart Association
2. CBHI – Community-Based Health Interventions
3. CBPR – Community-Based Participatory Research
4. CDC – Centers for Disease Control and Prevention
5. HHS – Health and Human Services
6. NCOA – National Council on Aging
7. NIH – National Institutes of Health
8. IAP2 – International Association for Public Participation
9. IBM SPSS – Statistical software for survey data analysis
10. SDH – Social Determinants of Health
11. SRH – Social-Relational Health
12. SPSS – Statistical Package for the Social Sciences
13. SET – Social Ecological Theory
14. LTC – Long-Term Care
15. DALY – Disability-Adjusted Life Years
16. WHO – World Health Organization
17. Zoom – Video conferencing platform

Terms and Concepts:

1. 50+ – Individuals aged 50 and older
2. Access to Healthcare – Ease of obtaining necessary medical services
3. Accessibility – Ensuring usability for individuals with different abilities
4. Active Aging – Physical, social, and mental engagement in older age
5. Advisory Committee – Stakeholder group providing guidance for survey design
6. Age-Friendly Environments – Accessible and supportive environments for older adults
7. Age-Friendly Health Systems – Healthcare systems meeting the needs of older adults
8. Aging in Place – Living independently in one's home and community
9. Aging Strategies – Policies to improve quality of life for aging populations
10. Assistive Technologies – Devices aiding individuals with disabilities
11. Baby Boomer Cohort – Individuals born between 1946 and 1964
12. Behavior Change Interventions – Strategies to modify health behaviors
13. Bias Minimization – Efforts to reduce bias during data collection
14. Caregiving – Roles and responsibilities in providing care for others
15. Co-Creation – Collaborative development with active stakeholder involvement
16. Co-Development – Collaborative process in designing programs or surveys
17. Collaborative Engagement – Working with diverse partners in research or programming
18. Collaborative Research – Research conducted in partnership with organizations or communities
19. Community Centre Visits – Interactions conducted at community centers
20. Community Centres – Local organizations offering services for older adults
21. Community Centred - Approach emphasizing the involvement of community members in the design, implementation, and evaluation of programs or initiatives affecting them
22. Community Engagement – Involving individuals in decisions affecting their community
23. Community Partners – Collaborating organizations or groups in research
24. Community-Based Health Interventions – Programs addressing health needs within a community
25. Community-Based Participatory Research – Collaborative research involving active community participation
26. Community-Based Primary Health Care – Health services provided in community settings
27. Community-Based Senior Centres – Local organizations promoting older adults' health
28. Composite Scores – Combined scores assessing related aspects of health
29. Cronbach's Alpha – Measure of internal consistency or reliability of survey instruments
30. Cultural Competency – Tailoring health initiatives to cultural needs
31. Data Collection – Gathering quantitative and qualitative data from participants

32. Data Privacy – Protecting personal data from unauthorized access
33. Data Sorting and Cleaning – Organizing and refining data for analysis
34. Demographic Groups – Categories based on shared characteristics
35. Demographic Information – Data on respondents' characteristics
36. Descriptive Statistics – Methods summarizing data, including means and frequencies
37. Disability-Adjusted Life Years – Metric measuring disease burden
38. Diverse Events – Community programs promoting inclusivity
39. Engagement and Well-Being – Active participation promoting mental and physical health
40. Engagement with Participants – Interactions ensuring comfort and sustained participation
41. Environmental Conditions – Aspects of the environment affecting health behavior
42. Ethics Application – Formal submission for research approval
43. Ethics Approval Number – Identifier for granted ethics approval
44. Evaluation Tools – Instruments used to assess program effectiveness
45. Feedback Integration – Incorporating input to refine and validate survey findings
46. Feedback Loops – Regular collection and use of participant feedback
47. Financial Assistance Programs – Subsidies promoting inclusivity for financially disadvantaged individuals
48. Functional Ability – Capacity to perform activities of daily living
49. Gerontology – Study of aging and issues faced by older adults
50. Health Dimensions – Categories of health measured in the survey
51. Health Equity – Fair access to health resources for all
52. Health Promotion – Efforts to encourage healthy behaviors and prevent health problems
53. Healthcare Management – Organizing healthcare systems to meet population needs
54. Healthy Aging – Maintaining physical, mental, and social well-being in older adulthood
55. Holistic Impact – Considering interconnectedness of social, mental, and physical health
56. Impact of Participation – Effects of involvement in community center programs
57. Inclusive Design – Creating accessible environments for diverse populations
58. Inclusive Survey Design – Designing surveys accessible to diverse participants
59. Inclusivity in Research and Programming – Ensuring research and programs are accessible to all
60. Indigenous Populations – Native groups with distinct cultural needs
61. Informed Consent – Ensuring participants understand research purpose and their rights
62. Intergenerational Programs – Initiatives fostering interaction between age groups
63. Interpersonal Influence – Influence of family, friends, and social networks on health behavior
64. Interview-Based Evaluation – Post-survey interviews to confirm understanding and gather insights
65. Iterative Process – Repetitive refinement of products, such as surveys

66. Iterative, Collaborative Process – Ongoing process of refinement through stakeholder input
67. Key Terms – Important concepts relevant to research or project
68. Loneliness Reduction – Strategies to reduce isolation in older adults
69. Longitudinal Study – Research tracking participants over time
70. Mental Health (MH) – Psychological well-being and emotional resilience
71. Mental Health Integration – Incorporating mental health into broader health promotion
72. Mental Health Resilience – Maintaining mental well-being despite challenges
73. Mobility Challenges – Limitations affecting freedom of movement
74. Multisectoral Actions – Collaborative efforts across sectors to address societal issues
75. Needs Assessment – Identifying a community’s needs to inform programming
76. Observational Data – Data collected through researcher observations
77. Older Adults Strategy – Framework supporting the well-being of older adults
78. Open Houses – Public events for engaging the community
79. Open-Ended Questions – Survey questions allowing detailed responses
80. Participant Comfort – Ensuring ease for participants to ensure accurate responses
81. Participatory Approach – Inclusive research methodology integrating community voices
82. Participatory Design – Collaboration in designing relevant and effective research tools
83. Perceived Risk – Individual’s assessment of health risks
84. Physical Activity – Exercise and movement programs for physical health
85. Policy Support – Government endorsement of health-promoting programs
86. Post-Survey Interviews – Interviews to evaluate survey clarity and effectiveness
87. Public Health Benefits – Health improvements resulting from public health programs
88. Qualitative Data – Non-numerical data providing deep insights into experiences
89. Quantitative Data – Numerical data analyzed statistically
90. Recreation Programming – Activities promoting physical, social, and mental well-being
91. Reliability – Consistency and dependability of survey results
92. Response Validity – Accuracy of survey responses
93. Sarcopenia – Age-related muscle loss and weakness
94. Self-Efficacy – Belief in one’s ability to succeed in specific situations
95. Social Engagement – Participation in activities that promote mental and emotional well-being
96. Social Inclusion – Full participation in community life for marginalized groups
97. Social Norms – Shared societal expectations influencing behavior
98. Social Support Networks – Groups providing emotional or practical help
99. Social Well-Being – Sense of belonging fostered by social engagement

100. Survey Design – Structure and content of surveys
101. Survey Development – Process of designing and refining surveys
102. Survey Methodology – Systematic approach to survey data collection
103. Survey Monkey – Online platform for survey creation and analysis
104. Survey Refinement – Improving surveys based on feedback and testing
105. Survey Responses – Data collected from survey participants
106. Survey Structure – Organization of survey questions
107. Survey – Tool for gathering data, such as in the study on community center participation
108. Sustained Engagement – Ongoing participation in activities promoting long-term well-being
109. Systemic Barriers – Obstacles hindering access to resources or services
110. Targeted Programming – Programs meeting the needs of specific groups
111. Thematic Analysis – Identifying patterns or themes in qualitative data
112. Unobtrusive Observations – Discreet research observations of natural behaviors
113. Usability – Ease of navigating and responding to a survey
114. Validity – Ensuring a survey measures its intended outcomes